

THE *Country* GUIDE

CANADA'S NATIONAL FARM MONTHLY

CORN AND STEERS

FIND THE MONEYMAKERS

GIFTS TO KNIT



Golden Harvest

SEPTEMBER 1962 - 15¢

MATCH THE WHEATS

SELKIRK?
THATCHER?
PEMBINA?

Study the kernel characters in the panels at the right . . . then, with arrows, match each variety with its correct panel number!

SELKIRK

A

THATCHER

B

PEMBINA

C

Identifying the variety of a threshed sample is even harder than grading wheat. Ask your U.G.G. agent. He has to know the difference between varieties because only certain ones are eligible for the top grades.

Your U.G.G. agent gets some help through special in-service training classes. But mostly, he learns to identify varieties by working on known samples over and over again. An agent identifies a variety by the process of elimination: he examines each character one by one and gradually eliminates all but the variety in question.

These are the variety characters he looks for:

- Color. Spring wheat can be light red, medium red, or dark red.
- Shape. The shape can be ovate, elliptical, or oval. An ovate kernel is broader at the germ end and is egg-shaped; an elliptical kernel is narrow, and rounded at the ends; and an oval kernel is broad across the centre and tapered slightly towards both ends.
- Shoulder. It is just back of the germ and it varies in depth from the back to the base of the kernel.
- Base. This is the crease side and you can see its shape when you lay the kernel on its side.
- Cheeks. The cheeks are the ridges at each side of the crease.
- Crease. The crease can be wide, mid-wide, or narrow. It can also be deep, mid-deep, or shallow. Some varieties have a pitted crease; others have a curved or twisted crease.
- Germ. This can be small, mid-size, or large and may be oval, round, or pointed.
- Brush. This is the small tuft of hairs at the end opposite the germ.
- Skin. The skin of the kernel may be smooth or wrinkled in varying degrees.

- Glumes. These are the husks that surround a kernel in the head and usually you can find a few in a threshed sample of wheat. They can be hairy or smooth.
- Size. This can be used but only if you take other characters into account. Growth conditions, of course, strongly affect the size of kernel.

Selkirk wheat has a kernel that is quite narrow in relation to its length. The germ is oval with a sharply pointed beak. The kernel itself is ovate in shape. In size, the kernels vary from medium to large. The back is mid-wide, has a side hump, and is slightly sloped from germ to brush. The skin is moderately wrinkled. The base is straight to slightly rounded. The color is medium red, dull, and inclined to a bronzed tint.

The outstanding characteristic of Thatcher is the small, uniform kernels with a silvery sheen. The kernels are small, oval to ovate, and wide in relation to length. The back is mid-wide to wide, side humped, and sloped from shoulder to brush. The shoulder is wide and mid-deep. The skin is smooth and has a

silvery sheen on the back and edges of the cheeks. The base is straight to slightly rounded.

If you study Pembina, you will notice that the kernels are extremely variable in size and in relation of length to width. Pembina is a dull, medium red in color. The shape is short to long, mid-wide, and ovate. The back is mid-wide to wide, side humped, and sloped from shoulder to brush. The shoulder is mid-wide to wide, and mid-deep. The skin is moderately wrinkled to smooth and the base is straight to rounded.

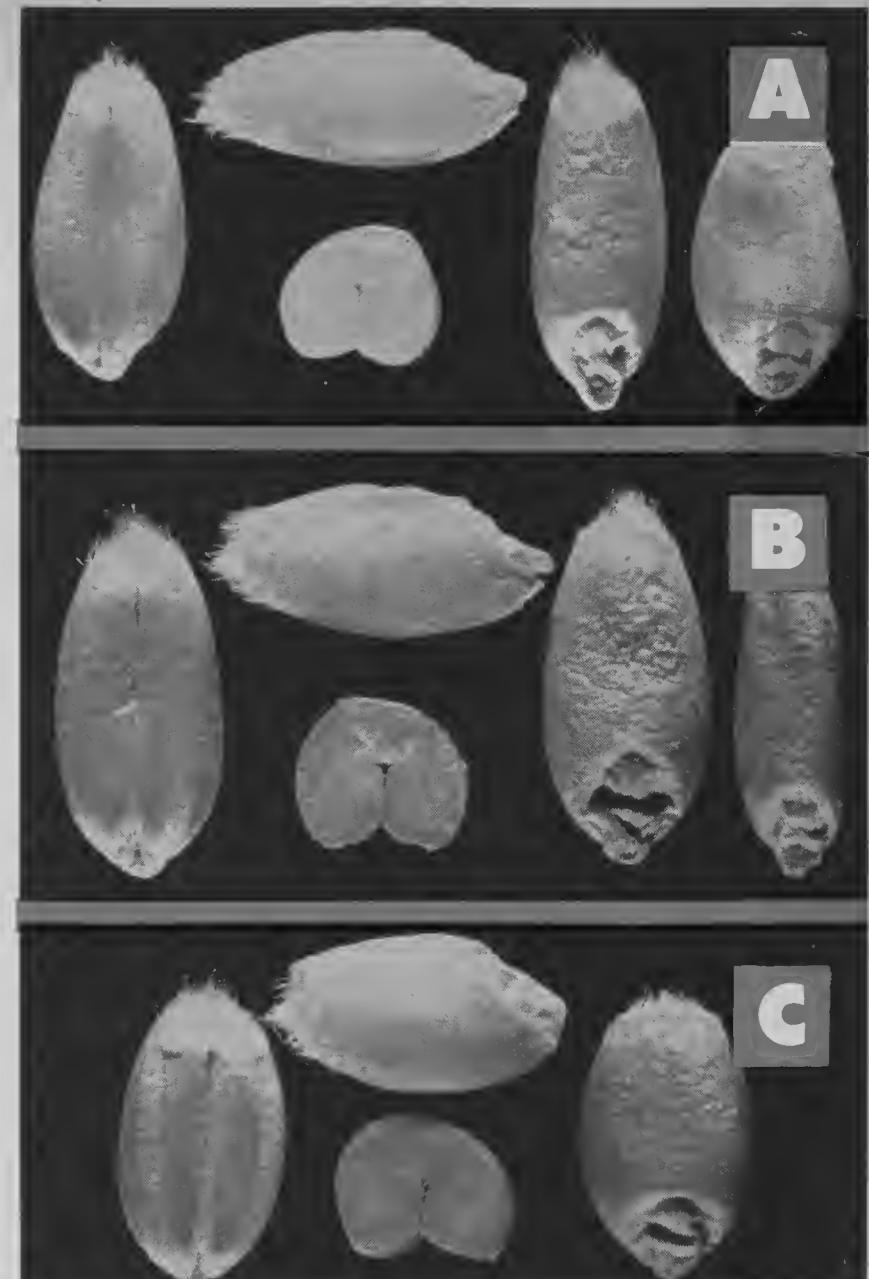
Before reading on, you might want to look at the panels again and revise your choices.

These are the answers: Selkirk wheat is shown in panel B; Thatcher wheat is shown in panel C; and Pembina wheat is shown in panel A.

Knowing how to identify wheat varieties is one part of your U.G.G. agent's job. He is interested in your problems. Just as the Company he represents is interested in your problems.

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You will find it pays to haul your grain to the U.G.G.



Photos by Board of Grain Commissioners, Grain Research Laboratory



...The Farmers' Company

THE Country GUIDE

Incorporating *The Nor'West Farmer and Farm and Home*

CANADA'S NATIONAL FARM MONTHLY

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In This Issue

"LET'S THINK IT OVER." In this issue, the Guide introduces a monthly column on religious themes. We have been asked frequently why we did not publish a feature of this nature, but there were difficulties, and not the least of them was how to present it in a way that would be acceptable to people of different faiths within the Christian community. We feel now that we have found both the method and the man to carry it out.

The Very Rev. Morse L. Goodman is well known for his talks on radio. He has a rare knack of presenting profound truths in terms that are readily understood, and he is skilled in stimulating thought in others—hence the title of the series, "Let's Think It Over."

Mr. Goodman was born and raised in a farming community in Victoria County, Ont. He went to school at Bowmanville, and eventually to the University of Toronto and Trinity College. He began his pastoral work at Fort William, then went to a dairy farming area in Oliver township before returning to Fort William for another 7 years. Later, he moved west to St. James, Man., and in 1960 he was called to Brandon.

The first of the new series appears on page 42.

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COVER: Blue sky, golden straw, and a nice young girl make an ideal combination on the harvest scene.—Donovan Clemson photo.

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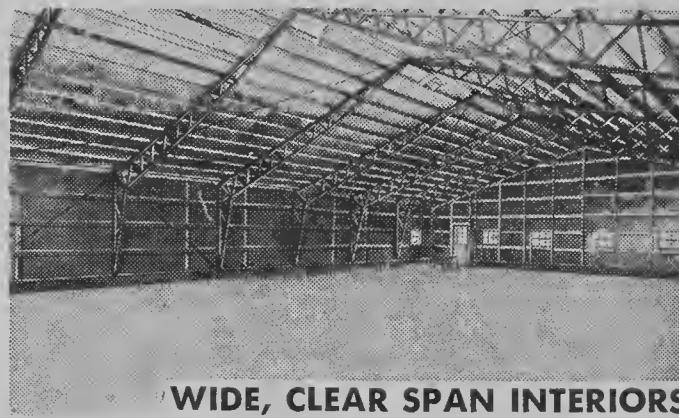
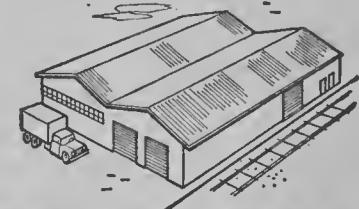
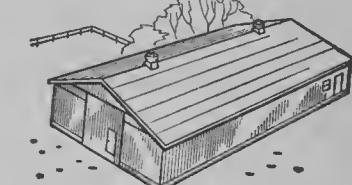
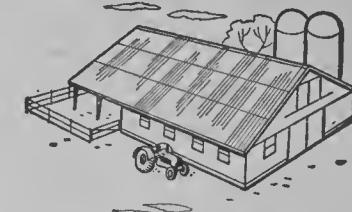
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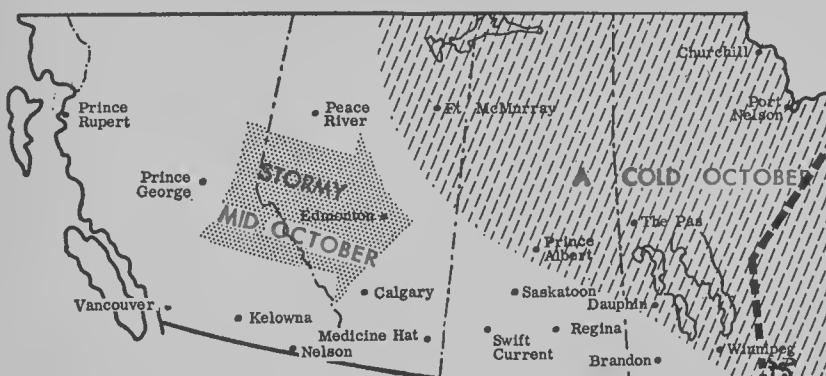
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HIGHLIGHTS, October 1962: Somewhat colder than normal weather is expected over most of Canada, except for near-normal temperatures in the Atlantic Provinces. The precipitation outlook is for above normal amounts in the Prairie and Atlantic Provinces, near normal elsewhere.

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—ed.)

Alberta

- | | T | P |
|-----------------|------|-----------|
| 1st week 1-6: | COLD | TH TH |
| 2nd week 7-13: | COLD | TH TH |
| 3rd week 14-20: | MILD | RAIN SNOW |
| 4th week 21-27: | COLD | TH TH |
| 5th week 28-31: | COLD | TH |
- Threatening weather on 1st and 2nd, light precipitation around 5th. Temperatures will range at chilly levels (30s) most days from 2nd through 6th.
Mostly fair skies this week throughout most of province. Quite cold (20s) during early part of week, but mild period (temperatures in 50s) from 10th through 13th.
A wet interval through 17th starting as rain, but likely turning to snow. Cold for a couple of days at mid-week. Mild at week end with readings in 60s in some locations.
No major storminess, a few showers likely on 21st, 24th and 27th. Temperatures in 20s and 30s at beginning of week, but seasonal through 27th; a little windy at mid-week.
No precipitation, mostly fair; temperatures will be colder than normal on 29th and 30th.

Saskatchewan

- | | T | P |
|-----------------|------|-----------|
| 1st week 1-6: | COLD | TH |
| 2nd week 7-13: | COLD | TH |
| 3rd week 14-20: | MILD | RAIN SNOW |
| 4th week 21-27: | COLD | TH |
| 5th week 28-31: | COLD | TH |
- Showery on 2nd, followed by more precipitation—also mostly rain—latter part of the week. Temperatures in 30s from 3rd to 6th.
Cold will persist through 8th. Temperatures will then climb into 60s for most of week. Chance of more showers in south on 9th, storminess in most other areas near 12th.
More precipitation is in store, ending around 17th. Temperatures will range near October normal values with the exception of a brief cold interval around 18th and 19th.
Variable weather, with threatening skies around 21st, 24th and 27th. Colder weather with temperatures in the 30s likely on a couple of days during first half of week.
No precipitation likely these four days. Temperatures at chilly levels on 29th and 30th.

Manitoba

- | | T | P |
|-----------------|------|-----------|
| 1st week 1-6: | COLD | TH |
| 2nd week 7-13: | COLD | TH |
| 3rd week 14-20: | MILD | RAIN SNOW |
| 4th week 21-27: | COLD | TH |
| 5th week 28-31: | COLD | TH |
- Mild first day, then temperatures mostly in 30s. Threatening weather on 2nd followed by some days with precipitation in latter part of interval.
Continued cold weather into 8th, followed by mild temperatures (60s) through 11th. More threats of showers likely on 9th, with more important storminess expected near 12th.
Heaviest precipitation of month between 15th and 18th, with mostly cloudy skies preventing much variation in temperature. Colder air in prospect during the latter part of the week.
Comparatively warm during this period, except for brief colder interval at mid-week. Some precipitation during first couple of days, windy conditions likely on 24th.
Dry weather and generally fair skies. Temperatures will likely be mostly in 40s.

Ontario

- | | T | P |
|-----------------|------|-----------|
| 1st week 1-6: | COLD | TH |
| 2nd week 7-13: | COLD | TH |
| 3rd week 14-20: | MILD | RAIN SNOW |
| 4th week 21-27: | COLD | TH |
| 5th week 28-31: | COLD | TH |
- Fair with chilly days (40s) will give way to increasing cloud and storm in latter half of week. Warmer temperatures will accompany wet interval.
Expect some rain to occur in most locations on a couple of days around the 9th and 10th. Seasonal temperatures are likely to be dominant during the entire week.
Temperatures will continue near normal during third week in October, except for brief cold interval around 18th and 19th. Look for rainy days from 16th through 18th.
More stormy weather will occur near the 22nd and 23rd and at the end of the week. At the same time, seasonal temperatures expected during the entire interval.
Generally dry, with sunny skies; turning briefly colder at the end of the month.

Quebec

- | | T | P |
|-----------------|------|----|
| 1st week 1-6: | COLD | TH |
| 2nd week 7-13: | MILD | TH |
| 3rd week 14-20: | COLD | TH |
| 4th week 21-27: | MILD | TH |
| 5th week 28-31: | COLD | TH |
- Generally fair, rather cold (20s at nights) on 1st and 2nd. Warming around mid-week; increasing cloud and unsettled weather into week end.
Unsettled weather will persist through 8th, especially in Lakes area; rain over most of province mid-week. Seasonal temperatures into 10th, followed by several days of freezing weather.
Most important precipitation of month from 16th through 18th, mainly as rain. Cold weather, days in 40s, expected on a couple of days in latter half of week.
Short intervals of unsettled weather will occur around 22nd and 27th. Temperatures will range at seasonal or slightly warmer levels during the entire week.
Month will close with mostly cloudy and chilly weather.

Atlantic Provinces

- | | T | P |
|-----------------|------|----|
| 1st week 1-6: | COLD | TH |
| 2nd week 7-13: | COLD | TH |
| 3rd week 14-20: | MILD | TH |
| 4th week 21-27: | COLD | TH |
| 5th week 28-31: | COLD | TH |
- Cloud and rain on 1st, 2nd, 5th and 6th, storms moving up from south. Seasonal to mild until cooler air arrives over week end.
Generally dry week with rain likely only around 11th. Cool temperatures mostly in 30s will begin and end interval. Mild weather expected for day or two around mid-week.
Rain will be confined mainly to southern half of the provinces near 17th and 20th. Mild weather with temperatures in 50s is expected to highlight this interval.
Cool fall weather at beginning of week, seasonal to mild conditions predominating. Mostly fair skies with threats of showers anticipated for only a day or two around 23rd.
Chilly, frequent storminess overspreading most of region during last four days.

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Editorials

Government Plays with Fire

ONE of the emergency measures taken by the Government in June to meet the foreign exchange crisis it precipitated was the imposition of *temporary surcharges* or extra duties on approximately one-half of Canada's imports.

A 5 per cent surcharge was applied to some \$2.3 billion of annual imports, described by the Prime Minister to be of a "less essential nature," for some of which surplus capacity exists in Canada and for others of which alternative Canadian products are available. A 10 per cent surcharge was imposed on \$650 million of annual imports, for most of which it was deemed possible for consumers to defer their purchases or for which Canadian production was available. Finally, a 15 per cent surcharge was placed on a group of imports which includes such luxury items as champagne, wines, spirits, jewelry, perfume, etc., totaling some \$150 million of annual imports.

The purpose of these surcharges is to put both the Federal budget and Canada's balance of international payments in better order. The Government estimates that the revenue to be obtained from the surcharges will amount to some \$200 million in a full fiscal year. When the surcharge measure is combined with actions announced to reduce Federal Government expenditures by \$250 million annually, and to sharply lower duty-free exemptions allowed Canadian tourists to other countries, the overall effect hoped for on a per annum basis is to reduce the budget deficit

by \$450 million, and to reduce the deficit in international payments by \$300 million.

The implementation of this emergency program was a solemn day for Canada. Obviously drastic action was required. Whether or not the steps taken were the right ones to stem the run on the Canadian dollar remains to be seen. But what we can be sure of is that higher tariff duties, in the form of surcharges, which have been imposed unilaterally and contrary to our obligations under the General Agreement on Tariffs and Trade (GATT), can only be self-defeating if their withdrawal is prolonged for any length of time.

The Canadian-American Committee, composed of business, agriculture, labor and professional leaders in both Canada and the United States, had some pertinent observations to make on this subject in its recent statement on the "U.S. Lumber Assistance Program." Here is what the Committee said:

"... we think it is unfortunate that the Canadian Government, in its recent emergency measures to deal with Canada's exchange crisis, chose to rely as heavily as has been the case on increased import surcharges, even as a temporary measure. Moreover, we consider that it is particularly unfortunate that these higher duties were imposed without convincing emphasis on their temporary nature, and without a clearer indication as to the probable limit of their duration. Such increases in duties, if long retained, will tend to impair rather than enhance the competitive

position of Canadian industry—and this just when it must be improved if Canada is to overcome its basic difficulties of recent years and resume a more satisfactory pace of economic growth."

We share the Committee's concern over the heavy reliance on and the duration of the surcharges for the views stated. We would also repeat a related danger that was drawn to the attention of our readers when the surcharges were first announced. There is, of course, the very real possibility of tariff reprisals. Other nations are also subject to balance of payments difficulties. In our efforts to discourage imports, we could place some of our exports in jeopardy, thus only serving to compound our foreign exchange, budget, unemployment and other problems.

Parliament meets later this month for the first time since the emergency measures were put into effect. It should be the overriding concern of all parties to restore confidence in Canada's financial and economic affairs, and to take steps to assure that the surcharges are removed at the earliest possible date. As Mr. R. M. Fowler, president of the Canadian Pulp and Paper Association said, in a recent address at the Mount Allison Summer Institute: "The whole point is that we cannot successfully and adequately handle our many national problems unless we have a trading policy that fosters rapid and sustained economic growth, which alone will make it possible to pay the cost of other desirable and necessary policies."

A Need for Reinsurance

WHEN the Federal Government passed its crop insurance legislation in July 1959, it agreed to pay half the administration costs, and 20 per cent of the total premiums assessed on behalf of any actuarially sound crop insurance program initiated by the provinces. At the same time the legislation provided for the Federal Government to lend money to any province in any year to cover losses up to 75 per cent of the amount by which indemnities exceeded the total of premium income, reserves of the provincial agency, and \$200,000. This meant, in effect, that while the Government of Canada stood ready to make loans to the provinces in the event of serious and widespread crop losses, the provinces were to be the ultimate bearers of the risk in any crop insurance program that came into effect under the legislation.

Manitoba was the first province to take advantage of the Federal action on crop insurance. Its all-risk program is now in its third year of operation on a test area basis. This year 4,428 grain producers, or roughly 10 per cent of the province's farmers, have insurance protection for their crops against losses due to

natural causes beyond their control. Total coverage under the Manitoba Crop Insurance Test Areas Act in 1962 amounts to more than \$10 million, against which the Agency has collected some \$700,000 in premiums from farmers. It can be readily seen that this has become a significant program—one from which useful experience is being gained.

Both in 1961 and again this year the value to farmers of having crop insurance has been dramatically demonstrated. Drought struck hard in 1961. This year, in sharp contrast, heavy rains have caused flood and lodging damage, to say nothing of losses incurred due to other natural causes such as hail, cutworms and wind. In fact, it is interesting to note that a tornado struck a district just adjacent to one of the four test areas of the province. It is most regrettable that those who suffered crop damage from this freak of nature were not covered by crop insurance. Farmers have now been shown beyond any shadow of a doubt what drastic changes can take place over wide areas during just two crop seasons, and that crop insurance indemnities can provide them with some very real stability in farm income to meet such contingencies. A great many more producers have had it brought forcefully home to them that crop losses due to natural causes don't just happen to the other fellow.

But while these early experiences have been useful in showing farmers the value of crop insurance, they have also underlined the fact that the provinces cannot broaden the test programs without more backing from the Federal Treasury. Before adequate reserves have been accumulated, provinces just don't have the kind of financial resources to meet the unpredictable commitments of an all-risk

crop insurance program in the event of heavy crop losses in a short period. Manitoba has been trying to convince Ottawa, with support from Saskatchewan, that the need to implement a reinsurance clause under the Federal legislation is essential if the crop insurance program is to go forward.

The principle of reinsurance is both simple and sound. The Manitoba Crop Insurance Agency is convinced that given a long enough period of time to build up reserves, the program can become operationally sound. In the meantime, the Agency would like to see the Federal Government insure the provincial government against short term losses under the program, rather than have the loaning arrangement specified in the existing legislation. For this sharing of the risk, the provincial government would pay an annual premium on an actuarial basis. It means a province could budget for a loss over time that it couldn't begin to meet in the event of serious crop losses in the short run. The Federal Government would be compensated through premiums for providing such protection to the provinces.

It is known that Agriculture Minister Alvin Hamilton is sympathetic to the reinsurance principle. It is to be hoped his colleagues in the Government and Members of Parliament generally will take action at the forthcoming session to amend the Federal Crop Insurance Act to include reinsurance. Otherwise, the encouraging progress that has been made to date under the legislation in Manitoba and Saskatchewan will be thwarted, and other provinces will become disillusioned about taking any steps to provide a much-needed crop insurance program for their farmers. V

GUIDE POSTS

UP-TO-DATE
FARM MARKET
FORECASTS

WHEAT MARKETINGS during 1962-63 will be at least 50 per cent larger than a year earlier. Expect delivery quotas to be quite restrictive until early summer, but commercial storage will fill up by July 31.

HIGH FED-CATTLE PRICES appear likely for the next 2 months. However, a build-up in cattle feeding operations on the Prairies is underway, so expect somewhat lower prices this winter and sharper declines next spring.

CARRYOVER OAT STOCKS at mid-summer were the smallest since the late 'forties but, due to careful feeding practices, were larger than might have been expected. This supply, coupled with new production, will be ample to meet domestic needs.

FEEDER CATTLE marketed early this fall may return the best profits. Since U.S. range pastures are good, shipments will be slow, thus feedlot operators in that country may need to bid high for early placements.

BARLEY STOCKS at July 31 were reduced to half those of a year earlier and were the smallest since 1951. The new crop will just meet our home requirements, so carryover stocks will have to be squeezed even smaller to meet any export demands.

HOG PRICES will weaken slightly during the early fall months due to an increase in marketings. Also, U.S. prices are expected to be lower and pork will be flowing north across the border.

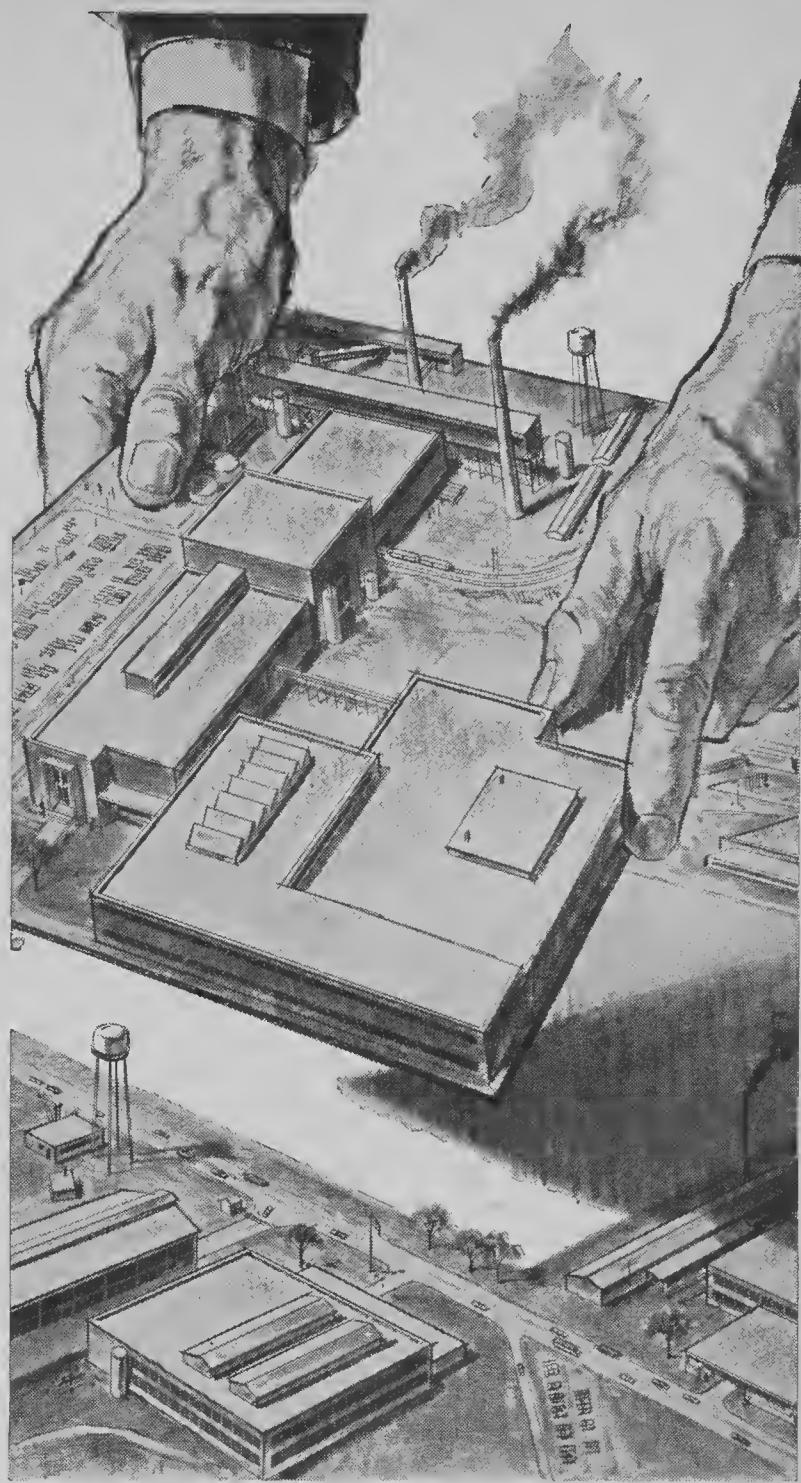
RYE PRICES will be forced down, since supplies for this marketing season will be some 20 per cent above last year's and no strong export market is in sight.

CULL COW HERDS EARLY to avoid an expected down-turn in fall prices. A shortage of fed cattle has been the main cause of the exceptionally good cow market this summer.

EARLY FALL BROILER HATCH was somewhat less than a year earlier indicating a strong market this fall, especially since beef and pork prices will still be relatively high during this period.

RAPSEED PRICES will continue weak throughout the 1962-63 crop year. While our crop will be smaller due to reduced acreage, carryover stocks at over two million bushels are by far the largest on record. European crops are also large.

WHEAT STOCKS, after a series of five rather unfavorable growing seasons, were still nearly 400 million bushels before this year's crop was harvested. With a return to average, or above average, rainfall this amount could increase rapidly.



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A Dean Speaks Frankly

Education is the most important determinant of the nation's future.

Dean Bentley urges Canadians, and especially farm folk, to face facts—not try to hide them!

by C. F. BENTLEY

*Dean, Faculty of Agriculture
University of Alberta*



C. F. Bentley

His Points

- Whether or not young people growing up in rural areas plan to remain in farming, they need to obtain the best possible education.
- Facilities for and the levels of education attained in rural communities are still inferior to those in urban centers.
- Modern farming requires levels of education second to no other common occupation.

- Numbers taking agricultural education in Canada compare unfavorably with those in other advanced countries.
- Technical agricultural knowledge is deficient in many businesses dealing with farming.
- More public benefit will be obtained from the education dollar than from any other public expenditure.

UNFORTUNATELY, too much of the public discussion related to education centers on its cost rather than on its purposes, and the contributions which it makes to human progress and betterment. However, for the cost conscious, there is one sure and simple way to curb the problem of constantly increasing costs of education in Canada. That is to have smaller families!

Canada has vast spaces. It is not yet plagued by population pressures as is much of the rest of the world. Perhaps that is why it is not generally known that the rate of population growth in this country exceeds the world average, or that there are approximately 700 school children for every 1,000 members of Canada's labor force. Actually the rate of population growth in Canada (2 per cent per year) exceeds the rate of population increase in India. However, in Canada, unlike the situation in India, the number of children in a family is largely determined by the wishes of the parents. Thus the situation is simple. An average of somewhat less than three children per family would maintain the present Canadian population. This rate could bring about either great reductions in the total bill for education, or, alternatively, vast improvements in the quality of education without the overall cost being higher. If Canadians wish to enjoy the luxury of the comparatively large families, they should stop bleating about the cost of the increasing education bill!

ONE of the greatest needs today is more public consideration of the purposes of education. It is obvious that many people think of education solely or primarily in terms of training for "a job." Stating it differently, the need for education is too often viewed in the purely material sense of making a living, or increasing one's income, or

improving the nation's productivity and level of living. It is true that the great material wealth we enjoy in North America has been, and is, possible because of the average level of education here, which is probably the highest of any comparable unselected group of people in the world. But, today, most Canadians are so satiated with material things that they don't want to work more hours for more "things." As a consequence the non-material values and benefits of education are yearly becoming more important to us.

We need wider public recognition that a basic purpose of education is preparation for good and responsible citizenship. The shorter work week means more leisure hours for Canadians. The type and amount of education which our young people receive will strongly affect how they enjoy those leisure hours, and whether they enhance the status of Canadians as a desirable cultured and civilized people.

ANY good livestock man knows that unless each succeeding generation of stock is better than preceding ones, then their status is declining. So too with man—and Canadians. If we are to make progress, not only in the material sense, but also in the areas of education and culture, we must continuously improve. Rising levels of civilization are dependent on average citizens having an ever better general level of education.

The objective of education for Canadians then should be to have continuous improvement of our people as desirable, healthy, happy, productive folk who will find increasing acceptance and stature among other world citizens as a distinctive people—Canadians!

Too few of us realize that the superior average level of education in the United States

largely explains why Americans enjoy a standard of living that is 25 to 30 per cent above the Canadian level. The existing difference may be illustrated in two ways. On a per capita basis Americans obtaining a first University degree in the year 1958-59 outnumbered Canadians two to one. The average level of education for all Canadians in 1950-51 was Grade 8 while it was Grade 11 for all Americans in 1958-59. Even those Canadians who completed their education in 1958-59 (surely the most highly educated generation of Canadians ever!) average only a Grade 10 education. Whether we like it or not, Canadians just don't go to school as many years as Americans. As a final example it may be mentioned that the number of Americans receiving education beyond the high school level in California exceeds the total number of Canadians in that category.

Our complacency and unthinking acceptance of propaganda result in the widely held, but erroneous, idea that Russian achievements are primarily in military areas, or have been possible mainly through applications of knowledge which the Western world has accumulated. But we must not overlook the fact that a high level of education is necessary to use and apply modern technology. And we must never forget that we will soon be outpaced if our competitors are better educated and work as hard or harder than we do. Today, on a per capita basis, young Russians receiving good quality advanced education outnumber comparable young Canadians.

NOW, how does the foregoing relate to the future of farming in Canada? Agriculture, like the rest of the Canadian economy is constantly becoming more technical and scientific. Farming is a business of increasing size and complexity. One forecast by the Alberta Royal Commission on Education was that by 1980 there will be jobs for only 4 per cent of the Canadian labor force as unskilled workers. It was also estimated that 4 out of 5 young people now growing up in rural Alberta will have to find their life occupation in something other than farming. Wide publicity has been given in recent winters to the fact that a majority of the unemployed have an education considerably below the Canadian average. It is therefore of great importance that young people growing up in our rural areas obtain the best possible education whether they plan to farm or not.

I attribute part of the current problems of agriculture and of farm people to the lower average level of education of rural citizens as compared

His Proposals

- A much larger proportion of our rural young should have vocational and/or university education in agriculture.
- Greater numbers of practicing farmers need to improve their knowledge of the technical aspects of farming through attendance at short courses.
- There should be a program specifically designed to assist and encourage some farmers to prepare for and enter other occupations.
- There should be a system to limit entry of young people into farming, possibly by requiring minimum standards of education and amounts of capital.
- Money paid to farmers, such as acreage and PFAA payments, should be related in some way to educational programs. (Examples are given of how this might be done.)
- Opportunities to have children should be limited for people with very low ability.

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A DEAN SPEAKS FRANKLY (Continued from preceding page)

to city people. Those with the higher levels of education find it comparatively easy to adjust to changes in methods and demands. Factories and other employers drop the least capable and less versatile employees when they are laying off workers. Similarly, as farming becomes even more technical and specialized, requiring ever larger amounts of capital for effective operating units, those farmers who are least adaptable and who lack adequate educational preparation will feel the pressures most.

Modern agriculture in Canada, which sentiment notwithstanding should be a business, requires levels of education second to no other common occupation. Farming is not an occupation for the slow witted, nor for those with inferior educations. Successful farm operators require a generally higher level of managerial ability and knowledge than do most independent owners of local businesses. And many such businesses involve less capital too!

IT is fairly well known that, in spite of many recent and overdue improvements in educational opportunities for rural youth in Canada, the facilities for and average level of education in rural communities are inferior to those in most urban centers. The 1951 Canadian Census showed that only 26 per cent of farm residents, who had completed their formal education, had 9 or more years of schooling. For urban residents it was 51 per cent.

Unfortunately, it is not generally known that in Canada agricultural education, measured in terms of those engaged in agriculture, compares poorly with similar groups in leading Western countries. A few examples are very revealing. In the United States in 1958 students enrolled in vocational agriculture programs were equal to 13 per cent of the country's farm labor force. In Canada, for 1959-60, the corresponding figure was equal to 3 per cent of the Canadian farm labor force. The annual number of graduates in agriculture from Iowa State University substantially exceeds the total number of graduates from all Canadian university programs in agriculture. In Holland almost all young farmers have received vocational education for farming. Britain, too, has an extensive program of vocational education for young farmers. These countries are friendly competitors. To compete more effectively we must improve the technical efficiency of Canadian agriculture through education and research.

I believe the technical agricultural knowledge of many businesses dealing primarily with agriculture to be deficient. For example, some banks in Alberta have specialists on their staffs who are technically and specifically qualified to deal with the oil industry. I do not know of any bank employing staff members with special technical qualifications to deal with their Alberta farm customers! Similar examples could be cited in other areas of business depending heavily on agriculture.

To make improvements in the caliber of Canadian Agriculture and the welfare of farm people there is need for more and better agricultural education at all levels. A much larger number and proportion of our rural youth should have vocational and/or university education in agriculture. Young people with such education, whether on farms, in their own business, or in the employ of commercial companies would make important contributions to a more productive and efficient industry. The farmers now on the land also need to improve their knowledge of the technical aspects of farming. In this regard, an expanded program of and better attendance at short courses could be very effective.

THERE are too many people trying to make a living on farms in Canada today. It would be in the best interests of all to keep out of agriculture those not likely to make a success of farming. Agriculture and some of its people could be helped by programs specifically designed to assist and encourage some farmers to prepare for and enter other occupations. Frequently such people could earn a better living because they would be more productive. Such programs would be as reasonable as the ones designed to assist those formerly employed as coal miners to become relocated in new occupations.

However, much of the needed change in the number of farmers in Canada could come about as older farmers retire, provided there was a system to limit entry of young people into the occupation of farming. A majority of Canadians now live where entry to most trades is legally limited and controlled. Surely it would be equally reasonable to limit entry to the occupation of farming by requiring would-be farmers to meet certain minimum standards of education and/or to have certain minimum amounts of capital. Such qualifications, properly applied, would improve the level of living on the average farm and should in the long run reduce the demands on public treasuries for agricultural assistance programs.

PRESENT acreage and Prairie Farm Assistance Act payments, while providing most farmers with sorely needed money, contribute nothing toward solutions of continuing farm problems. More benefit to farm people, and long run assistance in dealing with the problems of agriculture, could result if such payments were in some way related to educational programs.

Perhaps payments might be increased to farmers whose sons or daughters successfully took vocational or professional education in agriculture or homemaking. Perhaps payments might be increased to farmers who have satisfactory attendance at locally conducted agricultural short courses. A bolder, and probably more helpful program, might limit payments to those with satisfactory attendance at local short courses. Such a condition for assist-

ance could ensure that the substantial group of farmers who are seldom touched by agricultural education did get new technical knowledge.

Perhaps a scheme might be evolved to provide low interest loans or inducement grants to assist and encourage qualified agrologists to start an agriculture business serving farmers. A program of that kind would be rather comparable to existing ones designed to help revive depressed industrial areas.

I recognize the radical nature of the foregoing proposals and, of course, I feel that help to unemployed urban residents should follow generally similar lines. I should like to see more public agencies take the stand of the Victoria Welfare Department. Last winter it decided that there would be no social assistance to able bodied men who are unwilling to join the civil defense corps, which at that time was offering pay to those attending classes. As a taxpayer doing a very full year's work, I resent contributing to the support of people who are unwilling to make a good effort to help themselves. Politicians have recently expressed rather similar views. They need support for such courageous statements.

SITUATIONS such as the foregoing pose grave problems for Canada's future. I believe that a country providing "relief" monies to able bodied "unemployed" who are unwilling to attend educational programs when money is offered as an inducement, has lost so much of the characteristics of greatness that the nation is well started down the steep and slippery slopes of decline and decadence. Education as defined earlier, may prevent such a setting for the Canadian star.

I wish to mention one other matter which has been, and unwisely continues to be, virtually taboo in discussions about educational matters. There are some individuals of very low ability for whom no known program of training or education is likely to enable them to become fully self-supporting. When such individuals have offspring, additional vexatious burdens are placed on the educational system—and on other public agencies too! As the need for higher levels of education increases, people who can profit comparatively little from education pose progressively more serious problems to our nation. Employment in agriculture should not be a refuge for such people. We should apply our social and genetic knowledge to reduce the misery created when people of very low ability reproduce. We should limit the opportunity for them to have children. However, ignorance and traditions, and/or lack of leadership by politicians and others prevent such reasonable action being taken. Yet these are steps to be taken now.

Farm organizations should take the lead in educational problems because they are necessarily concerned with the welfare of their members. Meanwhile, the problems of agriculture will be reduced as the level of education of the average farmer rises. More public benefit and return will be obtained from the education dollar than from any other public expenditure. V

CORN AND STEERS

by DON BARON

Field Editor

DAIRYMEN Wilber and Gordon Smale have built up one of the most modern commercial dairy farms in Ontario in recent years. But, with their Holstein herd numbering 100 cows, the brothers decided the opportunities for expansion with milk cows were just about exhausted. Milk was in surplus and the outlook was uncertain. If they wanted to expand their farm enterprise still further, they would have to look elsewhere.

The Smales did begin to look around, but they didn't look for long. Last fall they built a feedlot right beside their dairy yard, and last winter they fed out their first lot of 350 calves, using their favorite crop—corn.

It was a surprising move at the time. But in recent months it has become apparent that the Smales were simply in the forefront of a trend that is reaching explosive proportions.

Corn-growing and beef-feeding have become the hottest topics of conversation in the province. More often than not, the two are being discussed together. In fact, Ontario may well be on the verge of becoming another corn belt. With the outlook for beef one of the brightest spots in farming today, feedlots are springing up through the province like mushrooms after a rainstorm.

Why? Several key developments are involved. Early-ripening hybrids, adaptable to just about any farming area in Ontario, have pushed back the frontier of Ontario's old corn belt. Selective herbicides, which control weeds, have helped to simplify corn-growing. Other new techniques have boosted average yields. Jumbo-sized silos, reaching 60 to 70 feet in the air, and with capacity for several hundred tons of silage, have simplified storage of the crop. Mechanical silo unloaders and auger-feeders have made cattle-feeding a push-button job. And now, farmers like the Smales are tying these developments together into a new kind of program in which they can feed steers at surprisingly low costs. Feed costs of 12, 13 and 14 cents per pound of gain on a steer are not uncommon. Farmers are producing half a ton or more of beef per acre of land, and are handling several hundred steers with little labor.

Look at the Smales, who grew 120 acres of corn last year, and boosted that to 200 this year.

Their feedlot is a model of mechanization. Mechanical unloaders scoop the silage out of the silo, pitch it down the chute, and a system of augers transfers it to the feedlot. A home-made device, mounted above the auger, meters out grain and concentrate mixtures into the silage, in the required proportions, as it is moved to the feed bunks. As a result, work in the feedlot is practically non-existent. It takes only 15 minutes, twice a day, to feed 325 cattle. It takes about 45 minutes, 3 times a week, to throw bedding into the pole barns. Mixing the grain and concentrate rations takes about 45 minutes every third day. And, occasionally, the Smales scrape off the concrete platform with the tractor blade.

BASIS OF A NEW INDUSTRY

Big corn yields and mechanical feed handling make low-cost feeding possible in Ontario



Beefman Vern Kaufman never pastures his cattle. His entire 90 acres now produce corn for feed.

HARVEY ACKERT is another who is caught up in this swing to a new kind of beef production. He has been a beef man for 25 years. But soil fertility and crop yields have been climbing in recent years and he has been buying more land too. Now that his two sons are apparently going to stay on the farm with him, he has made 1962 a year of big expansion. They are building a new feedlot for 500 steers.

The Ackerts' beef program will still make plenty of use of grass and hay. But it includes something else now—corn. Although their farm at Kincardine is 130 miles, as the crow flies, straight north of Chatham, the heart of Ontario's old corn belt, Ackert has been trying out some of the new early-maturing hybrids. He has learned how to grow and ripen the crop for grain and for silage. In fact, he grew 30 acres last year, and will grow 50 acres this year. And he'll fill his new 20 ft. by 70 ft. silo and, if the year is favorable, he'll have plenty of corn left over to pick for grain as well.

Vern Kaufman of Woodstock is another. He has been feeding about 450 cattle a year in his feedlot. Main feed in the past has been from the heavy yields of grass he grew on his 90 highly-fertilized and well-manured acres. He stored it in his big silo and added grain to the silage to balance the ration. Last year, he plowed up the grass and seeded corn instead. He built another



[Guide photos
Wilber Smale has been growing corn for their 350 feeder cattle and a cow herd. He uses six silos and an entirely mechanical feeding system.



The Smales move the feed from silo to bunk in 15 minutes, twice daily, at the push of a button.

silo, too, and wound up with enough feed to handle another 100 steers.

In fact, the swing is on this year to new beef feedlots, where home-grown corn will be fed.

Vern Kaufman has plenty of evidence. "In the past winter, more people than ever before have been into my own feedlot," he reports, "to see how the cattle are being handled, to discuss the possibilities of building feedlots of their own, and to try to size up the prospects for beef cattle."

(Please turn to next page)

CORN AND STEERS

(Continued from preceding page)



Silo builder Herb Campbell says the rush is on for feedlots in Ontario.

Herb Campbell is even closer to the trend. In fact, he is playing a part in leading it. Campbell is a silo-maker from Ingersoll. His firm is one of several which build the jumbo-sized, concrete-stave silos that have become popular in recent years. These silos are being built with mechanical unloading equipment installed. Campbell is even building the feed bunks for his customers too, and fitting them with augers—to make feeding a push-button job. In effect, he is selling a new farming system, based on high yields of corn and highly-mechanized feedlots.

He says: "Interest in corn-growing and beef feedlot set-ups is very high this year. People are becoming aware

that it's possible, in any place where a fellow can grow corn, to produce beef in a feedlot at low cost.

"A few years ago, when fellows were feeding 12 or 15 lb. of grain a day to steers, their gains were costing them 20 to 25 cents a pound. There was no money in that. But with home-grown corn, handled as silage, or high-moisture grain corn, it's a different story.

"Take a 400 lb. calf, feed him for 11½ months, and he will make 600 lb. of gain, using only 6 or 7 tons of silage, and supplements worth \$40 or \$50. If you use your own grain, such as grain corn, and feed 3 or 4 lb. of it per day per steer, you can cut back to \$20 or \$25 for supplement per steer. Cost of the gains those steers make in the feedlot will only be 12 to 15 cents a pound."

AND so the story goes. Dairyman Fred Cohoe of Burgessville looked for an opportunity to expand his farming program last year. He had already accumulated plenty of experience in growing corn. He points out: "Corn will yield more nutrients per acre than any other cattle feed I could grow. But you must convert them into something."

With no market for additional milk, he decided that beef cattle offered the next best bet. Together with a business man partner from Toronto, he is building a unit for 450 steers. It includes pole barns, silos, unloaders, and auger feeders.

Bob Pardo is another. He and his brother Gordon were grain-feeding steers in their mixed-farming oper-

ations at Cedar Springs in western Ontario. But under that program, costs ate up the returns, leaving no apparent profit. That's why they turned last year to a silo, and a corn silage program. They built a 20 ft. by 60 ft. silo and fed 100 steers through the winter. The steers got all the silage they wanted, plus 2½ lb. of grain, plus 1½ lb. of supplement. It's their way to cut costs. With feed making up about 80 per cent of the cost of feeding cattle, you've got to get the cheapest feed.

Beefman George Morris of Merlin has developed the idea to a fine science now. "There is no longer any profit to be made on margins," he points out. But by growing corn, Morris has cut to 11 or 12 cents the cost of feed required by steers to put on a pound of gain. He grows over 200 acres of corn now, ensiling some of it as silage, some as high-moisture, ground ear corn, and some as high-moisture, grain corn. Finally, the last of the crop is picked, shelled, and dried for storage in bins.

SO the story goes. Ontario's corn belt is expanding far beyond its western heartland. Prof. George Jones of the Ontario Agricultural College, whose call to farmers to grow more corn a few years ago was a voice in the wilderness, is now watching a surge of interest in his favorite crop. He estimates that Ontario growers are expanding their corn acreage by about 30 per cent this year. One agricultural representative, whose county was considered, until recently, to be beyond the corn

area of the province, estimates that 100 new silos will be built there this year.

Only one cloud hovers over this shining picture of the prospects for feeding beef cattle in Ontario. Every beef animal must have a mother. It takes a cow to produce a calf. And, so far, this expansion in Ontario's feedlots has not been matched by a corresponding breakthrough in expanding the supply of feeder cattle. In fact, last year's drought situation in the West, together with the discount of the Canadian dollar compared to that of the U.S., will have the opposite effect. There are likely to be fewer calves available for sale in the immediate future, and U.S. buyers will be bidding stronger than ever to get them.

If this proves to be the case, the only answer for feedlot owners will be to pare their costs right to the bone. That's the situation that newcomers like Fred Cohoe are facing up to. He says: "By growing heavy yields of corn, we have extremely cheap feed available. We'll simply have to hope we can keep our costs low enough to survive, no matter what price situation develops.

Sure the business will be tough. The margins seem to be negative ones now, and they may get worse. Our hope is to make it up in efficiency. We know how to grow corn and grow it well. And we are installing scales in the feedlot — to weigh steers individually—and cull out any that aren't doing well. We don't expect to get rich, but we do hope to make it worthwhile." v



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FIND THE MONEYMAKERS

Simple arithmetic helps, but only if you are ready to use careful bookkeeping and budgeting methods

by

RICHARD COBB
 Field Editor

WHAT can a man do to find the most profitable way to increase his farm's output? Figure out the alternatives on paper, says Andy Bruce. Make up a budget and keep records to check it out.

Andy Bruce farms 11-quarter-sections at Langbank, Sask., and has 1,200 acres under cultivation. That means a lot of grain, a lot of forage, and the need to find substantial markets. Andy is a newcomer to budgeting, but he likes it so much that he says, "I'd even quit curling to attend a meeting on budgets and management." And he doesn't take his curling lightly.

The trouble is, when you're new to the record-keeping game, you haven't many figures on which to base a decision. However, the farm management division of the Saskatchewan Department of Agriculture issues books which show how it is done, and Andy was able to obtain some of the figures from outside sources to serve as a guide.

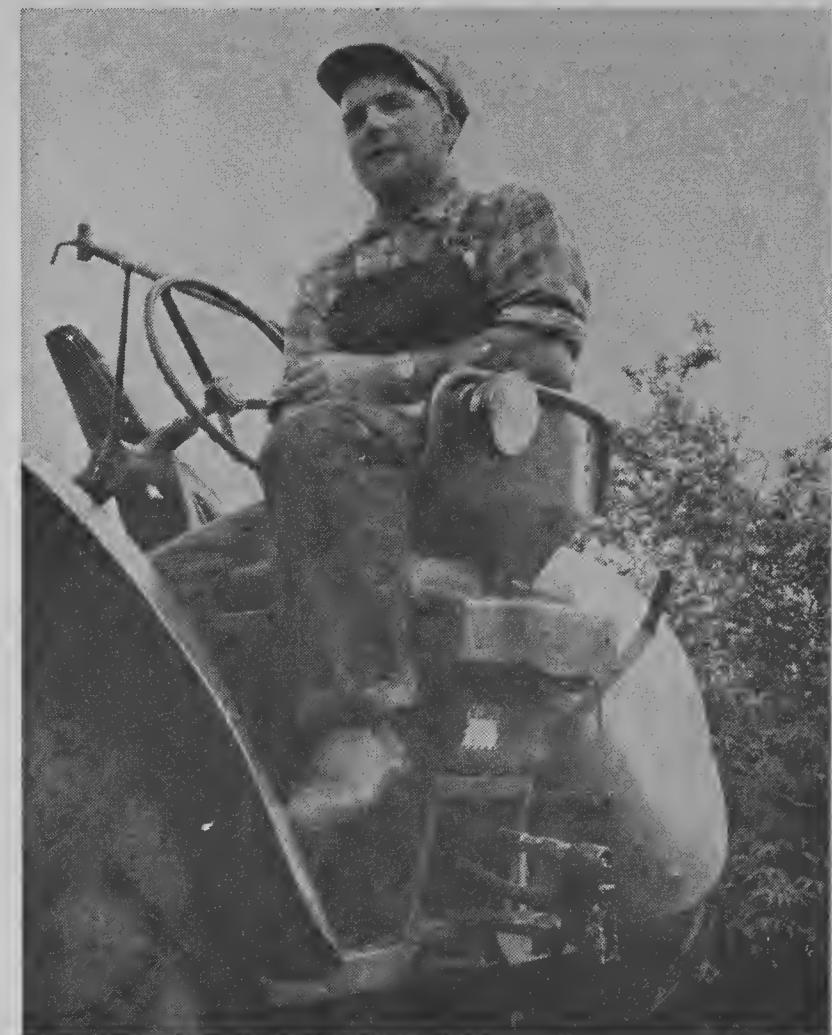
The question was whether he should feed more hogs or go into feeder cattle. He began with the hogs and figured it this way:

Feed for 10 sows for 12 months	\$ 766.00
(2 litters per sow, average 8 per litter, so 10 sows produce 160 pigs per year).	
Feed for 160 hogs from birth to market weight, plus veterinary and drug costs	2,352.00
Total cost of raising 160 hogs	\$3,118.00
Cost of raising 1 hog (divide by 160)	19.50
Estimated market price per hog	35.00
Estimated profit per hog	15.50

The purchase of the 10 sows cost him \$500, but he reckoned they were still worth \$500 at the end of the year, so they were not entered as a cost against the 160 market hogs. No allowance was made for machinery, which he would need with or without hogs, and also his low investment in buildings was excluded.

In the case of steers, figures supplied to Andy Bruce were based on the purchase of 50 steers at 650 lb., and feeding them to 1,050 lb. in 200 days, as follows:

Initial cost of 50 steers	\$ 6,500.00
Interest on \$6,500 and miscellaneous costs	739.00
Hay and grain fed for 200 days	2,785.00
Total cost for finishing 50 steers	\$10,024.00
Receipts from marketing steers, less yardage and commission	10,707.50
Profit on 50 steers	683.50
Profit per steer	13.67



Andy Bruce debated whether to have more hogs or cattle. He prepared budgets, based partly on figures from outside, and made his choice. [Guide photo]

Comparing the profit per hog, \$15.50, with the profit per steer, \$13.67, he decided to devote more of his resources to feeding hogs than to increasing his cattle feeding at the present time.

"But," says Andy Bruce, "there are so many variables—the selling price of hogs, the value of feed, for example—that no one can be absolutely certain." So the next step is to check these figures against his actual experience. He keeps records of every bushel of feed, an inventory of his breeding herd, his labor costs, the bedding costs, use of machinery and buildings, cash purchases (concentrates, fuel, etc.), and finally the money he receives. "The costs make a far longer list than the receipts," he says ruefully, "but by the end of this year I should have a complete set of records to show me where I'm going."

His guess is that he might be doing even better than the estimate indicated.

And did he get rid of his cattle? Here's where budgeting can be very tricky. On the basis of a partial budget he decided that cattle weren't such big moneymakers after all, but that was not a sufficient reason for making a major change. He has some land that is low and wet—no good for grain but suitable for cattle. Also, he has sufficient land to be able to put some of it into grass and clean it up in that way before returning it to grain production.

"This kind of thing affects your decision," says Andy. In this case, the decision was to push ahead with hog feeding but not to drop his cattle.

CROPS are subjected to the same record-keeping and analysis as other products, and here again the whole story is not in the figures. Crop decisions are based largely on the state of a shifting market. If there's a surplus of wheat, he grows more flax and rapeseed. This year, there's a strong market for wheat, so that's his best bet.

"What it boils down to," says Andy, "is that I can figure out how profitable a crop should be, but this only takes me so far. A crop could yield only 5 bushels per acre in a bad season, affecting

my cost of production per bushel, but not proving that the same crop would be unprofitable next season."

In spite of this, he still thinks it pays to keep track of costs and returns on crops.

Andy's interest in hogs dates back to 1952, when he had a barley surplus and "took a notion for them." He built a barn and, more recently, bought another farm with a hog barn on it. Now the pigs are farrowed and weaned at the home farm, and are sent to the other farm for growing and finishing.

Rhinitis ruined his herd 6 years ago and the vet advised him to get more rugged stock. He is now crossing Lacombe sows with Yorkshire boars and says his grades are better, and he has not had health problems with the crossbreds. The herd consists of 20 sows, which he hopes to have farrowing at a rate of 6 litters per month, instead of at the present interval of 3 months.

His cattle enterprise, which he decided not to develop into a large operation for the present at least, consists of 22 cows and 11 heifers, mostly purebred Herefords. He bought the grand champion bull at the Eastern Mainline Hereford sale last spring.

STILL looking for ways to stabilize his grain-livestock business, Andy placed an earth dam on a creek that runs through his farm and bought an irrigation outfit last spring. He is building another dam and expects to have a total of 23 acres for intensive production of brome and alfalfa under irrigation. If only he had had this during last year's drought, he says, he would have had no feeding problems.

Andy Bruce is particularly keen to set his farm on a sound, businesslike basis because he has twin 17-year-old sons, now at high school, who are likely to take up farming. Although budgeting may not cover every possibility, he says, it is essential in a modern farm operation. He intends to make maximum use of it, with help from Saskatchewan Department of Agriculture specialists through his local farm management club. □

Home in a Package

*"New techniques and quality control
are giving us manufactured homes which can be put up
in about 3 weeks"*

by CLIFF FAULKNOR

Field Editor



[Guide photos]

It was time for a new home, decided Francis and Dolores Byrnes. They chose a manufactured type.

If you need a new house but don't want to spend the whole summer wielding a claw hammer, or to board a couple of carpenters for two or three months, you might try a manufactured home. That is to say, a complete house in a "package" all ready to set up. Once you have your foundation prepared, such a home can be assembled on your farm in two to three weeks.

In case this conjures up visions of hurriedly built wartime housing which went by the nickname of "prefabs," you can rest assured. The get-rich-quick boys who made many of these boxy emergency units are out of business now. Today's manufactured homes are planned by architects and come in a wide range of styles. All materials are checked for quality and are cut by special precision machines so that every joint will fit snugly. Machines don't suffer from that "morning after" feeling—each cut is exactly the same as the last.

Buying a manufactured home has several practical advantages. For one thing, there is a saving because the materials are bought in large quantities. You don't have to pay for waste. Sections made in a factory are put together under controlled climatic conditions. Farmers who have to schedule their haying operations between showers will appreciate the value of this.

When you come right down to it, we have mass production of cars, ranges and refrigerators—why not homes? We wouldn't think of buying a truckload of metal and having some mechanic make us a car in the backyard.

These are some of the things Dolores and Francis Byrnes considered when they decided it was time for them to build a new home. Once they had made up their minds they got in touch with Ab Truss, general sales manager of Nelson Manufactured Homes in nearby Lloydminster, and asked to see a few plans.

Said Francis: "We figured a manufactured home would save us a month or so. I wanted to get the whole business over and done with by harvest."



This is the Byrnes farm home which cost about \$10,500. Speed and ease of construction ensured completion before harvest and that they would not have to face another winter in their old home.

THE Byrnes farm includes about 1,000 acres 9 miles northwest of Maidstone, Sask. About the middle of last winter, with the mercury touching bottom, they decided they'd had enough of the old frame house which had been on the farm when they took over in 1948. Built about 50 years ago, the place had no inside toilet, and water had to be carried from a pump across the yard.

"It was the winter situation that finally did it," Mrs. Byrnes said. "After last winter, if we hadn't done something about the water I would have moved into town."

From the Nelson catalog they chose a modern 2-bedroom home called the "Elmwood." For its location, they selected a spot in their farm garden so the new place could be landscaped more easily. The soil around the old house was too heavily compacted, with grass roots which ran away down.

Their "house in a package" arrived about 5 p.m. on a day in early July. While the truck crew unloaded, the builders (in this case supplied by Nelson's) stuffed fiberglass insulation along the top of the basement wall to stop condensation, they tacked down the plywood sub-flooring. Three-quarters of an hour after the first section had been raised, all sides were up.

Next day, a sudden rainstorm blew in and the job was temporarily halted. Francis took advantage of this to fill in around the foundation with his front-end loader. On the following day the roof was completed and the work could go on without interruption.

Well before harvest time the Byrnes home was ready, even to a primer coat of paint. When they added up the cost, Dolores and Francis found little reason to complain:

Cost of materials	\$4,595
Construction	651
	\$5,246

Add to this the cost of plumbing, heating, wiring, foundations, etc., and the total came to about \$10,500. This compared favorably with any similar home they could have had built piecemeal on the site.

"We won't be taking any holiday this year," said Mrs. Byrnes, "but getting into my new home will be holiday enough for me."

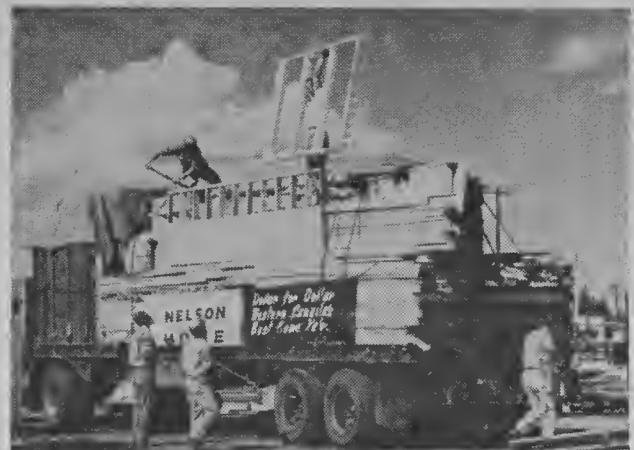
Factory-made homes must not be confused with shell homes where the exterior is put up on the buyer's property, and the interior finishing is left for him to do. Although individual firms may vary in the completeness of the "packages" they offer, all follow a common manufacturing procedure. They buy lumber, plywood and gypsum in volume and fabricate these raw materials into panels, roofs, pre-hung doors, trusses and windows. They have to re-style and re-tool almost as often as an auto plant.

Within reason, their product is shipped as a complete unit to wherever a buyer directs. A firm such as Nelson's, selling up to 400 packaged homes per season, will ship anywhere in Western Canada. Deliveries are generally timed to coincide with the completion of a basement or foundation.

As in the case of the Byrnes home, most of the cost is fixed in advance by the factory. In Canada, this can be paid for by NHA, VLA, FCC, or private loans. Only the plumbing, heating and electrical wiring have to be installed by local labor at prevailing rates. But being able to get a quality home in a hurry saves the busy farmer that most precious of all commodities—time. □



Lars Swanstrom of Marsden consulting assistant sales manager Dennis Wilson on a farm building.



The Byrnes packaged home being loaded onto a truck in readiness for the 35-mile journey to their farm.



The truck is unloaded and builders go straight to work. They are seen here tacking on the plywood sub-flooring.



Notice that fiberglass insulation is placed along foundation to prevent condensation.



Francis Byrnes had a crew from Nelson Homes put the house together. He wanted to be sure the work was finished before harvest—it was!



Working on walls. Only three-quarters of an hour after they raised the first section, every side had gone up.



Rain stopped construction at this stage and Francis had a chance to fill in dirt around the foundation.



Raising the main truss. The roof was finished on the day following the rain and there were no more interruptions.



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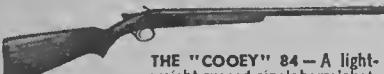
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**"THE WORLD'S
BEST CHEW"**

He Likes Holsteins for Beef

Their cheap purchase price and rapid gains made them highly profitable last year

by DON BARON

MURRAY JACK has tied together cash cropping, corn growing, and steer and hog feeding on his Kent County, Ont., farm, in recent years, and it has been a profitable program too. But one of his most profitable endeavors has involved feeding out straight Holstein steers. He bought about 20 of them in the fall of 1960, and they did so well for him that he bought over 100 in 1961. Those steers thrived on his winter growing and feeding program. They sold at a nice margin over his cost prices, too.



[Guide photos]

putting on flesh, he begins a 60- to 90-day finishing program. During that time, they get corn and cob meal with supplement added, and

into them then." By May or June, most of the steers will weigh 1,100 lb. or more, and be ready for market. Many of them will make blue-brand carcasses.

Actually, the Holsteins are just one part of the Murray Jack beef program. He also has a 75-cow purebred Aberdeen-Angus herd, and sells market calves from this herd in a baby beef program. There is quite a contrast when baby beef and Holsteins are being fed in the same lot but, according to Murray, both programs have a place if they are well handled.

Murray is one cattleman who hasn't yet got carried away with the idea of automation around the feedlot. He hasn't installed any mechanical silo unloaders or auger feeders for the yards. Silage and hay are handled in the old-fashioned way—by pitchfork.

"My hired man and I wintered 300 head of cattle on the two farmsteads last winter, and we didn't work very hard either," he says. "So why spend more money on equipment. I don't want to look after the cattle alone, no matter how little labor there is."



These Holstein steers are within a few weeks of being ready for market. Murray Jack feeds them a heavy corn and cob meal ration at this stage.

Murray's program is a flexible one. He'll buy cattle at any time of the year, whenever he thinks he can get them at the right price. This means he could be feeding an entirely different kind of cattle next year. But the price was right on Holsteins last fall. Drovers picked up the cattle for him, in various parts of Ontario, including the eastern part of the province. Prices were many cents below what he would pay for quality feeders. The steers came into his feedlot weighing 500 to 600 lb., although he often buys calves too and grows them on pasture before putting them into the feedlot.

HIS basic feed is corn silage. He grows 115 acres of corn, and stores some of it as silage, and some as high-moisture grain corn. Some is cribbed too.

When the Holsteins come into the barns for winter feeding, they are put on rations of all the corn silage they will eat, plus some hay and a bit of chopped corn and cob meal, or high-moisture grain corn. Then, when they begin to show signs of

some corn silage and hay. They eat a lot of grain during that final period, Murray admits. "But that's the time we are upgrading their entire carcass so it pays to put some expense



The Angus steers, raised as baby beef and marketed at about 850 to 900 lb. at 11 months, make quite a striking contrast in type with beef Holsteins.

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Footnote to "Through Field and Wood"

by CLARENCE TILLENIUS

IN a hotel room in the north of England—a spot far removed from my usual haunts—this is being written. By the time it appears I shall be in Canada again, returned from travels in Northern Europe, Scandinavia, and the British Isles, studying wildlife and landscape in many lands and under widely differing conditions. It has been my privilege to be a guest in the studios and on the estates of brother wildlife artists in Europe. From discussions with them, coupled with what I have seen in Europe, and the many interesting conversations with outdoorsmen in various countries, there is no question in my mind that in Canada we have something uniquely precious, irreplaceable, and fast-vanishing from the earth—wilderness.

All I have written in these columns, in this feature "Through Field and Wood," has had one intent: to communicate to you my feelings about wilderness, the animals that live there, and what the contemplation of this mysterious world does for the spirit of man.

Is wilderness doomed? All our pioneering instincts urge us to subdue it, to bring it under man's dominion. Yet, with the disappearing wilderness something wild and free that finds response deep in man's innermost soul, that subconsciously he yearns for with infinite yearning, something that man needs and *must* have, vanishes from the earth.

There ought to remain tracts of inviolate wilderness. Even though few people may want or even be able to visit them, just the fact that they are there—to be explored anew by fresh adventurers and left as they found them—gives an added dimension to life.

We have yet great areas of wilderness. While they remain, it is my hope to travel now and then both the areas I have been in and the ones I have not yet seen—and, perhaps, to describe them for you.

From now on, "Through Field and Wood" will not be seen every month in The Country Guide, and when it reappears in October, it will take a somewhat different form. It has often happened in the past that a subject proved too detailed or too wide-ranging to fit comfortably in the restricted space available for a two-column feature. In future there will be a full page to allow for inclusion of several drawings or paintings as well as text.

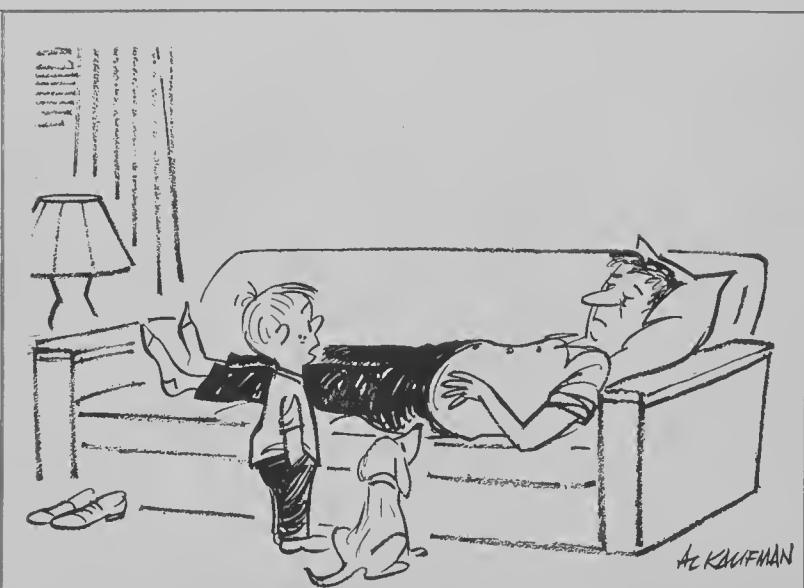
NATURE is all-inclusive: infinitely various. For these articles it has been a constant problem to choose from among thousands of possible treatments of a subject for the one that might conceivably appeal to a large number of readers.

It is hard to know what has appealed to readers, except from the letters they send. Moreover, an artist has very little time to spare for answering letters, and I take this opportunity to make apology to all who have written me personally and received no answer. There just has not been time. In any case, it is my hope that these articles I write serve in a kind of way as letters, since they are written for my friends, written to communicate to you some of the uplift that communion with the wild has always had for me.

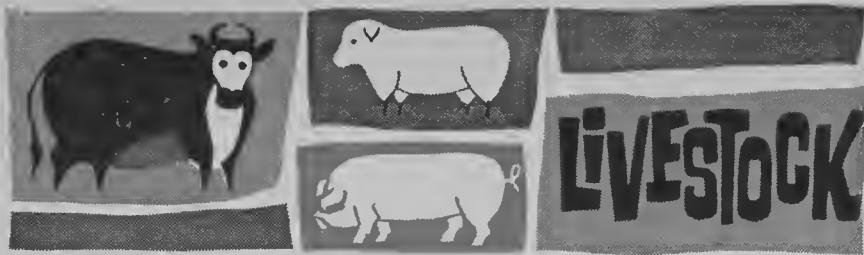
At any rate, the features will carry the same title: "Through Field and Wood" . . . and, even if they do only appear sporadically henceforth, I hope you may find in them something of the exaltation that nature is ever inviting you to seek—and share. V



(London Free Press photo)
Clarence Tillenius



"But if you were asleep, how do you know I made the sound that woke you up?"



Seven-in-One Vaccine for Sheep



Ingredients of the new seven-in-one sheep vaccine being blended together.

A NEW British vaccine for sheep is claimed to control seven separate diseases. Known as Convexin, the vaccine is formulated to give protection against seven major killers caused by soil bacteria. These diseases are lamb dysentery, pulpy kidney, tetanus, struck, braxy, black-leg, and black disease.

According to the British Information Services, the new discovery is not only a great labor-saver for the farmer, but it can cut lamb feeding time by 1 month. At present, lambs are weaned onto better pastures gradually because sudden access to lush pasture precipitates disease. V

Manicure for Cattle

MAKE sure that cattle have their hooves trimmed properly. They don't have much opportunity to keep the hooves worn down during the long winter confinement, with the result that toes become too long and animals shift their weight back onto their heels. This sets up severe strain on the pasterns and hocks, leading eventually to cramping.

The Ontario Department of Agriculture recommends that trimming should not be confined to the ends of the toes. The sole of the hoof needs trimming or rasping off to allow the front of the toe to set flat on the ground. Hoof snippers can be used for shortening toes, but a rasp or hoof knife is better for the soles.

Do not trim too much off at one time. If you do, the tender portion of the hoof may be injured and cause temporary lameness. If the hoof is badly shaped, it is best to use 2 or 3 trimmings at a couple of weeks apart. V

A Matter of Taste

FEED can have a proper balance of all the right nutrients and still not be satisfactory. The Ontario Department of Agriculture points out that feed efficiency is impaired if a ration does not taste good. Animals will not eat the proper amounts of unpalatable feeds and, in addition, digestion will be affected. Familiarity and habit are important to the palatability of a ration. Avoid

sudden changes from one feed to another. V

Black Scours Aided by Cool, Wet Weather

COOL weather with rain in the fall has affected almost 90 per cent of Ontario's lamb crop to some degree with black scours in the past. This is particularly serious because one-quarter to one-half of the lamb crop is still on farms in the fall.

D. J. Campbell of the Ontario Veterinary College says that wet weather stimulates a massive hatching of the black scour organism on pastures and the larvae are eaten. One of the first symptoms of black scours is a persistent greenish-black diarrhea which soils the hind-quarters of lambs. It may be watery in severe cases. The lambs gradually weaken and some die.

Dr. Campbell recommends micronized (small-particle) phenothiazine as a drench at the rate of 1 lb. in 1 quart of water. The drench may be difficult to mix, so he suggests that you make a paste with 1 lb. of phenothiazine and a little water. Add water gradually to the paste, stirring all the while, until you have added the whole quart. Keep stirring this emulsion while using it, or the powder will tend to settle at the bottom.

Drench each lamb with a quarter-cup (2 ounces) of liquid. A pound of phenothiazine and a quart of water can treat 18 to 20 lambs. The cost is 8 cents per lamb. V

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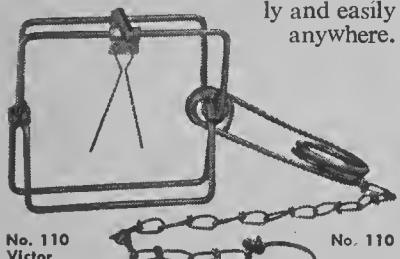
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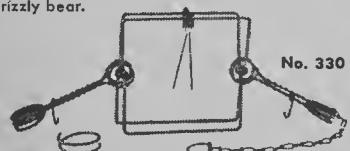
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Careful feeding and weighing are planned to result in \$2 per head profit. [Guide photo]

1,000 Lambs— A Safe Sideline

HOG farmer and cash cropper Andy Stewart of Highgate, Ont., was feeding off 1,000 Western lambs last winter, because he figured it as a safe sideline for a farm program like his own.

In making his decision last fall, Stewart reasoned this way. He had some feed available that he should use up over the winter. He had buildings available that could be fitted for lambs at very little cost. Since the government provided a price support program for lambs, in addition to premium payments for quality carcasses, he could find a measure of safety in feeding out lambs that he couldn't find with cattle.

Besides, those lambs would arrive from the West in November when farm work was largely done. They would be shipped to market by the first of April, too, when spring work commenced. And according to his calculations, he could make a profit of \$2 per lamb after allowing for feed and overhead.

It takes careful management to come out that well, of course. He was aiming for top quality carcasses to be sure he got as many government premiums as possible. He also wanted to market them at the highest possible weight.

So he decided to install a scale for weighing the lambs individually. Since he had to vaccinate the lambs for overeating disease on their arrival at the farm, he weighed them at the same time. They must be identified for the government premium program, so he did that too. He figured on weighing the lambs again as they neared market weight, to be sure they were at the top of the weight range, without being over it.—D.R.B. V

How Ration Affects Grades

IF high-energy finishing rations are reduced, market grades of hogs improve, says Dr. H. M. Cunningham of the Nappan Experimental Farm, N.S. He suggests that this can

iodine. When there are not enough teats for all pigs, move some to another sow, if you have one that farrowed in the previous 2 days. V

Straw-Grain Did the Trick

TESTS with a straw-grain ration last winter showed that it brought cows through winter in better condition and with greater economy than the usual oat straw and hay maintenance ration at the Beaverlodge Experimental Farm, Alta.

A. Reddon reports that one group received 2 parts oat straw to 3 parts hay, plus 15,000 international units of vitamin A per animal per day, and free access to mineral mix. A second group had oat straw plus a concentrate ration of 2 lb. oats, 2 lb. barley and 1 lb. legume seed screenings, and mineral mix and 30,000 units of vitamin A.

Maintenance outlay for grain-fed animals was 18 cents per day compared with 23 to 25 cents for those on straw-hay. Both groups of cows had 100 per cent calf crops.

The grain-straw ration was also effective in wintering yearling heifers. Weighed on May 23 they showed an average loss of 25 lb., compared with 100 lb. loss for those on a hay-straw ration. V

Steers on Irrigated Pasture

YEARLING steers have had daily gains of 2 to 2½ lb. on irrigated pasture, with 3 animals per acre. Tests at the Kamloops Range Experimental Farm, B.C., showed that irrigated pasture produced an average of 821 lb. of beef per acre.

Dr. H. H. Nicholson has reported that grazing days per season varied from 132 to 155 during 4 years, and annual production of beef ranged between 667 and 1,014 lb. The sward contained orchard grass, brome, and ladino clover.

In tests with grass alone, yearlings failed to produce carcasses that would grade choice or good, and they needed short-term finishing in feedlots to improve quality. V

Hunter's Victim Underlines Warning



The farmer's annual struggle with the lunatic fringe of the hunting fraternity was summed up by this warning beside a dead steer near Keoma, Alta. It read, "Hunters take warning. Step over the fence and you're in trouble." V

Certified SPF Herd Holds Hope for Swinemens

With one herd certified, and more to come, clean stock will be available to repopulate herds

HERE is good news for swinemens whose herds are harrassed by those perplexing diseases, virus pneumonia and atrophic rhinitis. The first herd known to be completely free of these diseases has now been certified under Ontario's Certified Herd Program. It is the herd of Bruce Wamsley and Herb Arkell at Teeswater. And, according to Dr. T. J. Alexander of the Ontario Veterinary College, which is involved in the program, several more herds in the province are likely to win certification soon.

The development holds out fresh hope for hogmen who have been virtually powerless in dealing with these widespread diseases. In the past there has been no known cure for them, nor any way to immunize against them. How tight a hold they had on the country's swine herds was indicated by some of the preliminary work that went into establishing the new Ontario policy.

Doctor Alexander reports that during the past 4 years, 50 purebred herds were carefully examined by veterinarians for the diseases. Owners of most of them thought the herds were free of the diseases. Yet, when heads and lungs from pigs were examined, every one of the herds was found to be infected. Concluded Doctor Alexander—nearly all herds must be infected.

The situation presented the swine industry with a dilemma, recalls Doctor Alexander. On the one hand, it meant there were two diseases which were present in most herds, and which were costing the industry dearly, and for which there was no treatment, no cure, and no control. On the other hand, there was only one method of eradication—the so-called Specific Pathogen Free (SPF) method—which called for the surgical removal of the pigs from the mother, and the raising of these pigs under controlled conditions.

"This method is too troublesome, too tricky, and far too expensive to be used by most farmers," says Doctor Alexander.

As a result, the Certified Hog Policy has been devised. Speaking for the O.V.C. which has facilities for the surgical removal of young pigs from sows, Doctor Alexander points out that its aim is not to repopulate a lot of herds with these surgically-removed primary SPF pigs. Rather, it is to establish a limited but adequate number of primary SPF herds from which other secondary herds can be repopulated. "It is expensive to establish a primary herd," he says, "but it is relatively easy and cheap to set up a secondary herd from it."

WITH one herd already certified, and more undoubtedly soon to gain that status, Doctor Alexander issues one word of warning.

Under the Ontario Certified Herd Policy, heads and lungs from all the

pigs slaughtered (and it must be a third of the offspring) from an SPF herd are examined. If, after 12 months, no lesions of either diseases have been observed, the herd is certified free of these diseases. It remains certified as long as the

examination of heads and lungs, which continues indefinitely, is negative.

"This is the crucial point," he says. "A farmer can say his herd is an SPF herd, and it means very little. A farmer can say his herd is an SPF herd and *certified* free of the two diseases, and it means a great deal, because no herds will be certified unless they are indeed free of these two diseases."

The program that can be followed by any farmer who finds that atrophic rhinitis or virus pneumonia is a problem, is this: He can sell his

infected stock when the prices are right. Then, he can clean his barns and repopulate with a nucleus of bred gilts bought from a *certified* SPF herd.—D.R.B. ✓

Short-Tempered Sows

DON'T take chances with short-tempered sows, especially at farrowing time. The Ontario Department of Agriculture warns that sows with pig can be vicious, and can mangle a hand or leg. Carry some protection if you have to go into the pen. A light gate, a hurdle, or even a scoop shovel will do. ✓

MASTER RESEARCH GOES NATIONAL



Today . . . livestock and poultry feeds that are backed by the dollars-and-cents research at Master Feeds Farm, are reaching farmers across Canada.

The Master Feeds Farm covers 600 acres of land, and sells eggs, milk, beef, pork, turkeys, broilers and mink pelts. But its MOST IMPORTANT product is INFORMATION.

This information is used to evaluate the formulations of all Master Feeds. Every feed in the Master line is constantly challenged by new formulations. If the new formula makes more net profit for the feeder it is adopted, and the old formula is thrown out. If the old formula makes more net profit, it is retained . . . and the new one is modified for another challenge.

Thus, nothing is left to chance or "guess-work" in the manufacture of feeds that carry the "Master" name and trademark. They are made from formulas that have been proved "most profitable" by the animals and birds at Master Feeds Farm.

Experimental work with new drugs goes on at Master Feeds Farm under direction of Dr. Doug Morrison (right), Director of Nutrition and Research. Holding the bird is Dan Price-Jones, Manager of the Poultry Research Unit, while Dr. E. R. Bowness, Director of Fur Animal Research, makes notes.

NOW! MASTER AND PIONEER-CAFETERIA are one feed—to serve you better

Amalgamation with Pioneer-Cafeteria Feeds Ltd. . . . provides the facilities to distribute the new Master Feeds across the nation. So the benefits of the Master Research Farm are now available to farmers in all parts of Canada. Master Feeds, division of Maple Leaf Mills Limited, Saint John, N.B., Montreal, Toronto, Winnipeg, Calgary.



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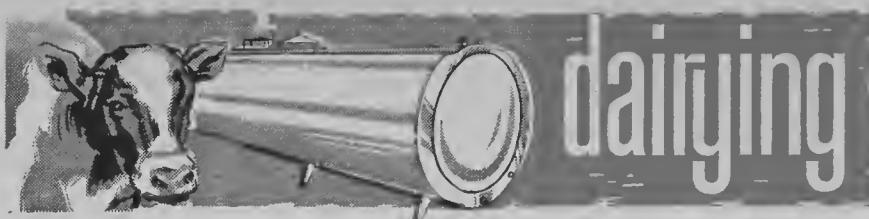
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ALWAYS LOOK TO IMPERIAL FOR THE BEST



Milking Parlor and Stanchion Barn

These dairymen are retaining their old stanchion barns while adding a milking parlor for convenience



[Guide photo]

Jack Hargreaves and son Larry in front of new milking parlor and milk house added to the old stanchion barn.

DAIRYMEN J. R. Hargreaves and son Jack figure, when it comes to their farm buildings, that they have the best of two worlds. They have a stanchion barn equipped with a mechanical gutter cleaner, and a milking parlor too, with a pipeline leading directly to their bulk tank.

It was last fall that the two dairymen, who farm at Woodstock, in Oxford County, Ontario, faced the need for a new milk house. The dairy to which they ship fluid milk was turning to bulk pickup. The question was, how would they get the milk from the stable into that bulk tank?

They didn't want to abandon their old stable, and turn to a loafing parlor set-up. There were, however, several other alternatives. They could install a pipeline system, but the cost would be high. A pipeline system fitted with dumping stations would be less costly, but less efficient too. Cheapest system would be to simply use milk cans, and haul these back and forth through the stable. Each of these systems had one big disadvantage though — they still left too much bending and stooping to be done at milking time. Jack Hargreaves figured he had been stooping beside cows long enough.

After further consideration, the Hargreaves chose a different system. Along with the milk house that they needed for their bulk tank, they built an entirely new milking parlor. "It wasn't the cheapest way to solve the problem," Jack admits, "but as a long term investment, it should be sound."

A new pole barn was required in the system too. In winter, the cows go outside, and through the holding area in the pole barn on the way to

the milking parlor. From the parlor, they go directly back to the stable. In the summer they never come into the stable at all, so cleaning-up chores are greatly reduced.

Jack and his father aren't the only ones in the area who like this milking parlor-stable combination either. Several other district dairymen have turned to it in recent months. Jack has a 4-stall parlor, and since his herd is purebred, he has individual weigh bottles at each unit.

District agricultural engineer Bob Milne of Woodstock assisted in design of the building. It includes a small office for bookwork, and a washroom with toilet.

Electric radiant heaters hung from the ceiling provide heat in the parlor.
—D.R.B.

Fallout Is Taken Out

MUCH has been heard about Strontium 90, which is one of the dangers in fallout from nuclear explosions, if there is a sufficient quantity of it. It looks, now, as if there may be a satisfactory method for removing it from milk, should the need ever arise.

The method, devised by Dr. B. B. Migicovsky of the Canada Department of Agriculture and now being tested, is similar to present milk processing except that a special resin and some chemical treatment have been added. The milk is treated with citric acid and passed through pipes containing the resin, which removes 98 per cent of the Strontium 90, rather as chemicals soften hard water. The milk is then treated with potassium hydroxide to neutralize

the citric acid, and is pasteurized and homogenized. Water, which is added with the chemicals, is removed by flash-heating the milk in a vacuum chamber.

Tests have shown that the treated milk is as palatable as the normal milk from standard dairy plants. ✓

You Can Use Rapeseed Meal

RAPSEED oil meal is comparable to other protein supplements for dairy cattle when the price is favorable. This is the conclusion drawn from some tests at the Lethbridge Research Station, Alta.

R. David Clark reports that in a test for rearing young dairy calves on limited whole milk (8 lb. per head per day for 28 days) they used a protein starter containing grain, alfalfa meal, soybean meal, minerals, and either rapeseed or linseed oil meal. The rapeseed and linseed meal made up 10 per cent of the ration. The rapeseed was unpalatable to young calves at weaning, but there was no difference in feed consumption or body growth between groups at 4 or 16 weeks of age. After the 16-week test, the calves were all treated alike and growth from 16 to 52 weeks was the same for both systems of early feeding.

In field trials with two dairy herds—one Holstein, one Ayrshire—rapeseed oil meal was compared with other protein supplements in the concentrate rations. Seven pairs of cows were selected in each herd according to age, lactation number, stage of lactation, and production. One group of cows in each herd was a control group and received the normal concentrate ration; the other group had a comparable ration containing about 10 per cent rapeseed meal in place of the other protein supplement. The concentrate was fed at the rate of 1 lb. per 5 lb. of milk. Alfalfa hay was fed free choice. The trials lasted for 8 weeks.

In the Ayrshire herd, the average daily milk production in the 2 weeks before the test was 35.6 lb. per head per day on rapeseed and 34.9 lb. for the control group. There were no significant differences between the two groups during the test.

Average daily milk production in the Holstein herd was 41.9 lb. on rapeseed and 40.2 on the control ration during the 2 weeks before the test. The daily average for the last 2 weeks was 41.1 lb. on rapeseed and 39.7 on normal ration.

The Ayrshire herd manager had no difficulty in switching abruptly from the normal ration to rapeseed meal, which contains a bitter substance. The Holstein herd manager said that a couple of days were needed for the changeover. ✓

No Place for Billions of Bacteria

KEEP milking machines clean. There's no more important way to maintain a low bacteria count in milk, says Dr. C. K. Johns of the Dairy Technology Institute, Ottawa.

Dr. Johns points out that the

growth of billions of bacteria is promoted by milk residues in the fine cracks of rubberware, especially in teat-cup liners. Reduce the risk of cracked rubberware by replacing liners after about 750 milkings—that is 50 milkings of 15 cows.

You can save money by having two sets of liners in use. If each set is used for a week and then rested for a week in a 5 per cent lye solution, it will last half as long again as a set that is in constant use.

Another good idea, says Dr. Johns, is to suck a pail of recommended sanitizing solution through each unit just before use. This solution will

also treat cans, strainers, etc., and wash the cows' udders, too.

Immediately after milking, suck a pailful of clean, cold water through each unit. Brush the liners in a hot solution of a reliable dairy cleanser, and fill them with lye solution at 2 teaspoons per gallon of soft water. Brush the pail and pailhead in hot cleansing solution, rinse them in clean water, and invert them on a metal rack to drain and dry.

If you want all the details, obtain a free copy of "How to Care for Milking Machines and Rubberware" from Information Division, Department of Agriculture, Ottawa. ✓



R. L. Robinson, B.E.
(Agricultural Engineer)

Ron Robinson Answers Young Farmers' Question

FIR PLYWOOD WILL DO MORE THINGS, INDOORS & OUTDOORS, THAN ANY OTHER MATERIAL

No contractor would use three different building materials if one would do. Neither would the farmer for his farm buildings. He wants a single material that's readily available, that does a lot of building jobs and is easily worked.

1. I want a material I can use for all farm buildings and odd jobs. Is Fir Plywood the answer? There's no material for building everything on the farm, but Fir Plywood certainly comes closer to it than anything else. Do you know any other material you can use to build everything from a big machinery storage shed to a small hoghouse? Concrete is too heavy for portable structures, and metal can't be worked by ordinary farm labour. Fir Plywood is a 'sandwich' of several wooden sheets bonded together for high strength and resilience. You can make dozens of things for the farm with Fir Plywood — pens, doors, gussets, chutes, crates, pallet bins — the list is always growing. You can build carts, bins and self-feeders of any size. And don't forget your home. Fir Plywood kitchen cabinets and living-room furniture are easily made.

2. How does Fir Plywood work with various insulating materials? Will it line a metal building? Fir Plywood will sheath and line any kind of building. The panels are big and squared. That means building is quick, and the panels fit snugly together. There will be little air infiltration because there are few joints, so your insulation will be more efficient.

3. Where can I get plans of all these Fir Plywood structures? And what about construction costs? Lumber dealers stock plans produced by the Plywood Manufacturers Association. You can also get plans from the Canadian Farm Building Plan Service through your provincial Department of Agriculture or the Plywood Manufacturers Association. Costs are kept down because you don't need any special tools or trained carpenters. And the building goes up quickly because Fir Plywood panels cover 32 square feet at a time. By the way, remember that you can prefabricate indoors during the off-season and put the building up later.

4. My limited capital has to go a long way and I want a reliable investment. Does Fir Plywood have long-term economy? The economy of a building material is a many-sided question, so let me deal with each aspect in turn. The initial cost of a Fir Plywood structure is low because construction is quick and easy, and you don't need special equipment or skills. Physical depreciation is very small because Fir Plywood has the strength and resilience to resist all kinds of abuse from livestock and the weight of bulk storage year after year. Fir Plywood doesn't crack or crumble like concrete. It won't corrode like metal. Fir Plywood is bonded with waterproof glue and stands up to everything the weatherman can think of. *Fir Plywood's wide usefulness and its valuable economies over a long period make it the most practical building material of all. Every farmer should discuss it with his lumber dealer because the more Fir Plywood is used on the farm, the better a farmer can compete under modern conditions.*

Waterproof Glue FIR PLYWOOD

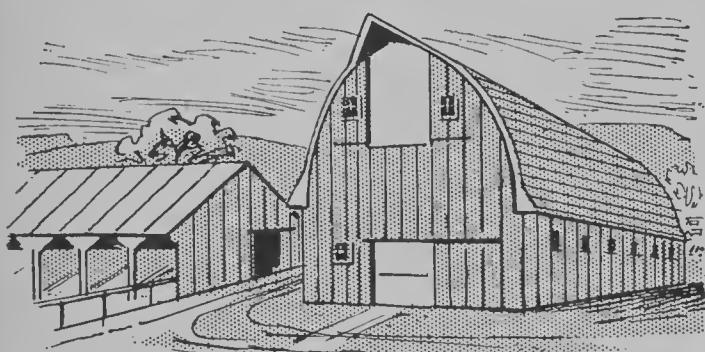
Plywood marked **PMBC EXTERIOR** has waterproof glue. Western Softwood Plywood, also available, is end-marked PMBC WATERPROOF GLUE WSP.

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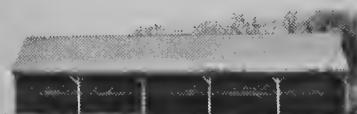
ROOFING & SIDING in Standard Galvanized Steel or Aluminum or in COLOUR!

Appearance and durability are the two features that make WESTEEL metal roofing and siding the best long-term investment in farm building. It is available in the standard finish, or a choice of six attractive baked on enamel colours. The exclusive "Colorite" process permanently bonds the acrylic enamel finish to the metal. This tough coating, thoroughly tested and proven, withstands the rugged beating of severe weather without blistering or peeling. Buildings remain fresh and neat in appearance year after year with virtually no maintenance.

Low cost pole barns and maintenance sheds can be constructed quickly and easily—will give protection



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Be Right with Vaccines

VACCINES used in poultry flocks have their limitations. Robert P. Hanson and Merwin Frey of the University of Wisconsin point out that you must use the right vaccine, in the right manner, and at the right time. And, even then, things sometimes go wrong and the vaccine fails.

They say that vaccines are useful only if they stimulate the production of antibodies in the blood of the treated bird. If a poultryman stores a vaccine carelessly, or administers it wrongly, its potency will be destroyed before it can reach the bird. As examples of misuse, a vaccine may be ruined by storage in a hot place, or it may be a drinking-water vaccine which is added to a chemically-treated water that makes the vaccine inactive.

Remember, too, that it takes a while for vaccination to work. Usually a bird will not show signs of resistance to a disease for a week, and full protection may not develop for several weeks. However, birds will resist an infection 2 weeks after most vaccinations. Some vaccines will give immunity for as short a period as 6 months, while others may protect birds for more than 6 years.

Where the risk of infection is low, Hanson and Frey say that chicks should not be vaccinated until they are 6 weeks old. Vaccination does not cause very effective antibody production in young birds. But, if there is a strong risk of infection, earlier vaccination will give temporary protection which lasts until the chicks are old enough to obtain a longer-lasting benefit.

Another point to note is that poor

nutrition or failure to eat can interfere with a vaccine's effectiveness. There is also the possibility that stress or other disease infections will interfere with a vaccine's action. But, with proper care, vaccines will do the job they are intended for. ✓

Three Birds in One Cage?

IT is suggested by British poultry specialists that there's more profit from a laying flock if there are three birds to a cage. The advantage of gross profit from this method would increase as the price of eggs is reduced.

At the University of Reading, they experimented with 15 in. battery cages housing equal numbers of birds at 1, 2 and 3 birds per cage. Records to 500 days of age showed that the mean daily rates of lay per hen were very similar for each number per cage. There were very small differences in mortality, and the average yields per hen housed were 258, 261, and 255 for 1, 2 and 3 birds per cage respectively.

Pullets housed 3 to a cage consumed 2 per cent less food and weighed slightly less at the end of the year than 2 birds per cage. ✓

Keep Shell Intact

HOW do most cracks and breakages occur in eggs on the farm? The damage is traced mainly to the nest, say researchers of the Ontario Department of Agriculture. They suggest that chickens should be given adequate nesting space, and also that the nests should be well padded with clean nesting material to reduce egg breakages and to help in keeping the eggs clean. ✓

Homemade Cooler for Eggs



Researchers at the Ontario Agricultural College suggest this easy way to cool eggs instantly. Build a wind tunnel as shown in the photograph and place an ordinary fan at one end. This flow of air will be sufficient to penetrate through to the eggs in the center of the baskets and cool them. FOAC photo

Host to '61 Plowing Match wins an extra 25% power for his tractor...

130,000 spectators who watched the '61 Ontario Plowman's Association Match on Horace Knight's farm would probably be as surprised as he was at this astonishing fact: new Champion Spark Plugs added over 25% more to his tractor's power!

Even though Horace Knight is a lifetime veteran in the farming industry, he was completely taken by surprise at some unexpected facts revealed at a recent "Dynamometer Clinic" held at the Alton-Hadley Massey-Ferguson Dealership in Belleville, Ontario. With several other local farmers, Mr. Knight brought his Farmall Super C Tractor in for power and economy tests run on an A and W dynamometer and special fuel-flow meters. First with the old plugs—then with new Champions.

The results amazed even the most experienced farmers. Nearly all tractors tested showed significant savings in fuel—and big improvements in power! Horace Knight's Farmall actually delivered over 25% more horsepower just with four new Champions! When confronted with actual proof of this

power recovery, Horace Knight said "Well I've come up against some surprises. But this sure beats 'em all. I never figured that new spark plugs could make such a difference to my tractor's operation. And I never figured that I was losing so much power and money. Now I know how much difference new plugs can make I'm going to change them regularly. Farming is a business . . . and anything that saves me money is good business."

Why was Horace Knight so surprised by the improvement made to his tractor's performance with new Champions? Because he relied on his ears to tell him when his spark plugs were acting up. He listened to his engine, and if it sounded good, he figured the plugs must be good, too. Horace Knight didn't know that borderline spark plugs can rob power and steal gas without noticeable

misfiring or engine shake. Like most other farmers present at his farm during the big International Plowing Match held there in '61, he was unaware that borderline spark plugs could run away with so much cold, hard cash.

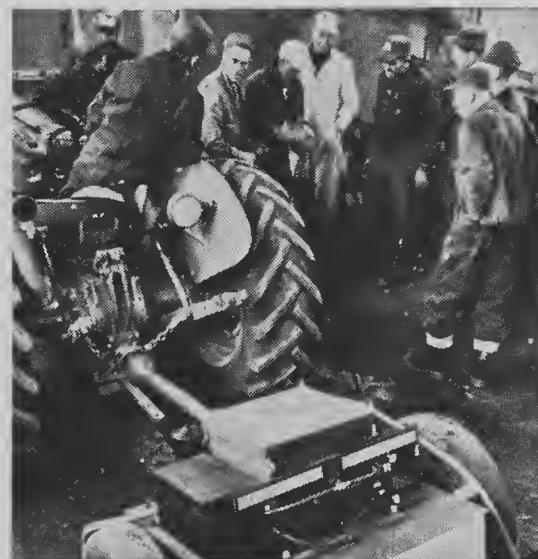
How long since you changed your tractor's spark plugs? 'Way back in '61 at harvest time—or maybe even before, during spring planting? If your plugs are older than 250 hours then take a good, hard look at the experience of Horace Knight.

His old spark plugs were robbing him of time and money—because they were borderline. In fact, every time he switched on his tractor, he was literally *pouring money down the drain!* Make sure this waste doesn't strike at you 'behind your back'.

**Protect your pocketbook—
save gas, time and money.
Install new Champions now
and every 250 hours.**



Dynamometer expert Art Warsaw shows Horace Knight the results of fuel-flow Test No. 10: a saving of over 11% in gas consumption just with new Champions!



Belleville farmers gather around to see for themselves how in test after test, new Champions made money-saving improvements in power and gas consumption.



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Here's **BIG POWER** with a b

PROVED for big lugging power...
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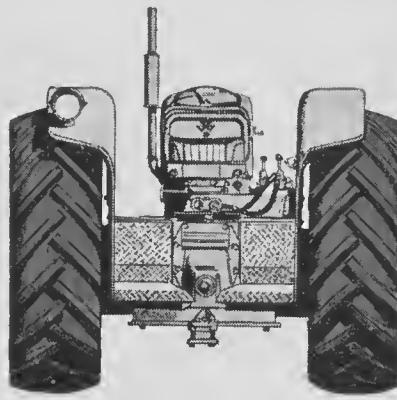
PROVED! SUPER DIESEL POWER. New last spring, this one's proved itself on job after job to be *full* 5-plow strong. Up over "60 horse" in brute pulling power. Lugs big drawbar implements all day without breaking stride. Takes tough going and sudden overloads that would stall out others. Up to three heavy-duty remote hydraulic cylinders control big implements. But for all its size and power, this one is never awkward, never "fights" you. It's easy to manoeuvre. Quick to respond. The big, husky Super Diesel called "90" is a natural born lugger, Western style!

PROVED! SUPER DIESEL ECONOMY. When it comes to fuel economy, no other tractor in its power class can surpass it. Massey-Ferguson's new 302.2 cu. in. diesel power plant with Direct Injection does it. Gets more power per gallon. Gives you the most efficient combustion a diesel ever had. A dynamic balancer keeps the engine running smoothly at all speeds and under all loads. Electric heating element in intake manifold assures easy starting in cold weather. The Super 90 Diesel is built for minimum maintenance too, with chrome sleeves, ceramic-coated muffler, many more built-in, long-life features. And there's a wide range of 8 practical forward gear speeds to work in, and 2 reverse gear speeds.

PROVED! SUPER DIESEL COMFORT. You sit up high out of the dust, in the most comfortable seat ever. It's a deep-cushioned, shock-absorbing, torsion-suspended seat, fully adjustable to your height and weight. It slides back out of your way for plenty of standing room. The Super 90's controls are all conveniently located, including the remote-cylinder control levers. You get Power Steering, of course, and Variable Drive PTO. The Super Diesel called "90" is the one you *must* see. Also available with Ferguson System and adjustable front axle. Call for a demonstration today!

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Wide, non-slip steel platforms provide ample room . . . step plates for mounting easily from front or rear . . . big, drawer-type tool box slides out from under left foot platform . . . massive, heavy-duty swinging drawbar.



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Bruce Bomberger

More Poult By Selection

THE "birth rate" of a turkey flock has been increased by 12 poulets per hen as a result of 4 years of intensive family selection at the University of Wisconsin. Poulets were selected from the 25 or 30 per cent of hens that had the highest egg production, fertility, and hatchability records. They kept only the daughters of these birds and used them to reproduce the flock. The same practice was followed each year.

Researchers made their selections strictly on the number of eggs, the percentage of eggs that were fertile, and the ease with which the eggs hatched. But they also kept track of other characteristics to see how they were changing as a result of selection.

It was found that as the number of "good" eggs per hen increased, the size of these eggs decreased. Average egg weight in the flock is now about 2 grams lighter than it was in 1958. In addition to this, the male poulets average about 1 lb. lighter at 16 weeks of age than male poulets in 1958.

It is considered, however, that there are enough extra birds from each hen to more than make up for the decrease in body weight. In the original flock, each hen produced 270 lb. of live males, whereas the 1961 average per hen was up 40 lb. in spite of the smaller poulets.

The disadvantage of decreased egg and body weight can probably be overcome by selecting the female poulets for body weight in addition to the three egg characteristics. Crossing the high-producing hens with toms selected for body weight would probably help with the weight problem too. ✓

Watch the Temperature



LOAC photo

Your hand can't tell the temperature of water correctly for washing eggs. Ontario Agricultural College poultry specialists recommend that you use a thermometer, keep water at 110°F. for 3 minutes, then remove the eggs.

Less per Dozen

THE poultryman who removes the sick birds and poor producers from his laying flock is increasing the average quality of the birds that he retains. At the same time, he is reducing the amount of feed required to produce a dozen eggs, say poultry specialists with the Alberta Department of Agriculture. ✓



This fluffy-crumb layer cake combines luscious coconut flavor right in the batter with mouth watering milk-chocolate icing. And when you bake it with Magic, you'll serve it with pride!

I made it myself - with Magic!

LUSCIOUS COCONUT LAYER CAKE

Sift together
2½ c. once-sifted
pastry flour
or 2 c. once-sifted
all-purpose flour
3 tsps. Magic Baking
Powder
½ tsp. salt

Cream in a mixing bowl
¾ c. butter or
Blue Bonnet Margarine
Gradually blend in
1¼ c. fine granulated sugar
Add, one at a time, beating
in well after each addition

2 eggs
1 egg white

Combine

⅔ c. milk
¾ tsp. vanilla

Add dry ingredients to creamed mixture part at a time, alternating with milk and combining lightly after each addition.

Fold in

¾ c. cut-up shredded
coconut

Turn batter into 3 greased 8" round layer cake pans, lined in the bottom with greased waxed paper. Bake in mod. hot

oven, 375°, 20 to 25 mins. Stand on wire racks 10 mins. Turn out, peel off paper and allow cakes to cool completely. Put layers together with a filling and frosting of Milk Chocolate Icing and sprinkle with toasted coconut.

Milk Chocolate Icing: Sift 3½ c. sifted icing sugar and ½ c. coconut together. Cream ½ c. butter or Blue Bonnet Margarine; add 1 egg yolk and beat until well blended. Add sugar-coconut mixture alternately with sufficient hot cream (about ½ cup) to make an icing of spreading consistency. Beat in 1 tsp. vanilla.



Another fine product of
STANDARD BRANDS LIMITED



New Wheat - Old Problem

A NEW wheat with resistance to sawflies has been developed by the Prairie Region Project Group of the Canada Department of Agriculture, under the leadership of the Lethbridge Research Station, Alta. Known as Cypress, the new variety has shown its superiority to Rescue in quality and to Chinook in sawfly resistance. It is the result of a cross between the two older varieties. Other features of the new wheat are the plumpness and good color of the kernel.

Cypress will not be available for general use before the winter of 1963-64.

This development comes at a time when the sawfly problem may be returning to the wheat fields. The pest caused millions of dollars worth of damage before 1955. Then, between 1955 and 1959, wheat harvests were late and there was an increase of the parasite that helps to control the sawfly.

Dr. N. D. Holmes of Lethbridge says the parasite is a wasp that overwinters in the larva stage inside wheat stubble. The adult emerges in the spring and finds a sawfly larva inside a wheat stem. It stings the larva with a paralyzing chemical and lays an egg on or near it. The wasp egg hatches into a larva, which feeds on the sawfly larva for about 10 days. It then forms a cocoon and emerges through the stem as an adult in August.

The adult cannot overwinter and it must find other sawfly larvae to parasitize. But, if the wheat is ripe at that time, the sawfly larvae will have cut the stems and escaped into the stubs below.

In moist areas of the Prairies, where wheat ripens late, the parasite usually controls the sawfly. But the parasite has another hazard beside early-ripening wheat. When sawfly infestations are high, many sawfly

larvae occur inside the same stem. The parasite attacks only one and this may be destroyed by the other sawfly larvae, leaving no food for the wasp larvae.

There is not much that can be done at present to increase the numbers of the parasite. But stubble should not be burned because burning destroys the parasite and not the sawfly, which is below ground at the time. It is hoped that the new Cypress sawfly-resistant wheat will help to relieve the situation in the next few years. V

Droppings Spread by Harrow

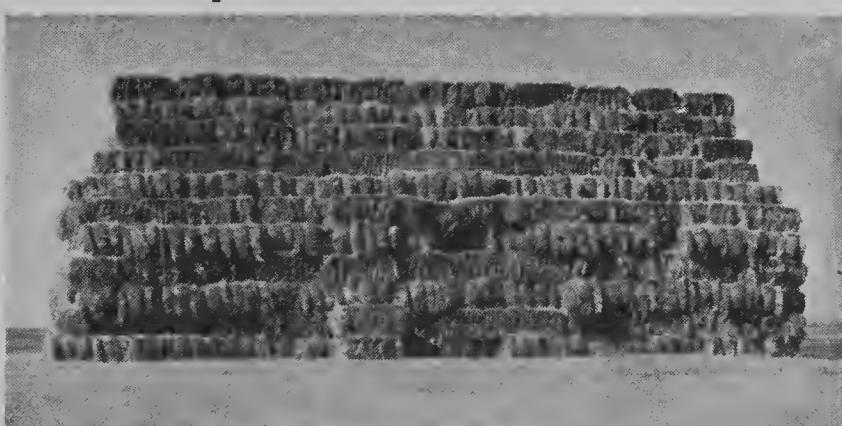
ONE of the most valuable tools in pasture management is the flexible chain harrow. The Ontario Department of Agriculture points out that manure from cattle on pasture can be very helpful or very harmful to pasture, but harrowing makes the difference for several reasons:

1. Harrowing increases pasture yields by spreading the droppings.
2. Weeds, bluegrass, and redtop are reduced by harrowing because droppings that are not spread will smother the plants under them, and the resulting bare patches become filled with weeds and low-yielding bluegrass and redtop.
3. Harrowing encourages more uniform grazing because cattle do not graze near droppings, the pastures become uneven, and some feed is wasted while other areas are overgrazed. Harrowing reduces this selective grazing.

4. If manure is applied to pasture, it can be better distributed by harrowing. Also, dead plant material left over from previous years breaks down more quickly when the field is harrowed.

Chain harrows injure plants less than spike-tooth harrows, but a worn spike-tooth, or a spike-tooth used upside down, can be of value in pasture management. V

Good Crop Insurance



[Sask. Govt photo] You can build a fodder reserve like this by putting idle acres into grass production, says the Saskatchewan Department of Agriculture. The department urges farmers to give serious thought to seeding forage in the fall.

Treatments for Pocket Gophers

THREE are several ways to get rid of pocket gophers if they become a menace. R. D. Bird of the Winnipeg Research Station explains that they live mostly in tunnels which connect their mounds. They plug the holes with soil and come above ground only during the breeding season. They feed on alfalfa and grass roots, and sometimes invade gardens.

Pocket gophers are the size of common gophers. They are mouse-colored and have short, almost hairless tails, and large external cheek

pouches. They are often confused with the much smaller moles.

Bird suggests that pieces of carrot, turnip, or potato should be dusted with gopher poison and dropped into the tunnel between fresh mounds, or that a spoonful of calcium cyanide should be poured in, killing the animal with the gases it gives off. The tunnel must be located by probing with a stick. Alternatively, an ordinary gopher trap can be set in the tunnel, with the jaws of the trap parallel with the sides. Be sure to cover the opening with a shingle and cover the shingle with soil. Light must be excluded, or the gopher will cover the poison or trap with soil. V



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Corn Up 30 per cent without Quack Grass

QUACK grass is a menace in itself, but it has an added disadvantage as a host to ergot—a very poisonous fungus. The Ontario Department of Agriculture says that ergot can be recognized by black masses that develop in place of the seed on the head of quack grass.

Quack grass, also known as twitch grass or couch grass, is very persistent. Its stems, if cut up by a disc and dragged by other machinery, will produce new plants that eventually will infest a new area. Mechanical control can be achieved only by frequent plowing and thorough cultivation with a spring-tooth harrow or a cultivator in hot, dry weather.

Chemical control is costly, but effective, and it may increase the yield of corn by as much as 30 per cent. One method recommended by the Ontario weed specialists is to spray quack grass with Amitrol T at 2 lb. in 30 gallons of water per acre, while it is 3 in. to 4 in. high in the spring. When the quack grass becomes white, plow and plant to corn immediately. Follow this with pre-emergence or early post-emer-

gence application of 4 lb. of Atrazine 50W in 20 to 30 gallons of water per acre.

The second method recommended is a split application of Atrazine 50W. The first application is 4 lb. in 20 gallons of water per acre when quack grass is 3 to 4 in. high, then plow and plant corn. Apply again at the same rate, pre-emergence or post-emergence. Corn must be grown for 2 years in this field before any other crop can be planted. V

One-Two Punch for Canada Thistle

CANADA thistle, one of the most common and troublesome of Western Canada's weeds, is on the increase. It can be controlled by a combination of herbicides and cultivation.

D. E. Forsberg of the Scott Experimental Farm, Sask., says Canada thistle spreads by seed and by underground roots. Herbicides may prevent production of seed, but it is difficult to destroy the roots. At Scott, in the summerfallow year, they used spring tillage to control annual weeds and volunteer grain, and followed this with an application of 16 ounces of 2,4-D ester per

acre when the thistles began to bud. For the remainder of the summer, weeds were controlled by intensive tillage as required.

During the next crop year, top growth of thistles was greatly reduced by spraying the crop with 12 ounces of 2,4-D ester, when thistles were 4 to 6 inches high. Plots treated in that way averaged 12.2 bushels more per acre than untreated ones. V

System Farming with Grain and Livestock

CORN grower and hog producer Andy Stewart of Morpeth, Ont., has a good reason for handling his grain corn on a high-moisture basis. It is a well-known fact now that high-moisture corn—grain corn stored in silos at about 25 per cent moisture—stores and keeps well in upright, concrete silos.

Stewart points out that he handled 40,000 bushels of corn that way last year. The corn was picked, moved to storage, and then fed out to the hogs during the year. And it was all done without putting a shovel into the grain. It's a work-saving method, he points out. In fact, it's a "system" that leaves little work, and calls for very little overhead.

Here is how he handles the crop. He uses the corn picker, which shells

the corn right in the fields, just as if the corn was dry. The moist corn is then blown right into the silos. Feeding is a push-button job, with augers carrying it right to the pigs.—D.R.B. V

Blackbird Not So Black?

AFTER studying the habits of a large number of blackbirds, Dr. R. D. Bird of the Winnipeg Research Station reports that there is some good in them.

The study involved shooting a total of 500 blackbirds between May and October at intervals of 2 weeks, and examining their stomachs to find what they had been eating. This is what was discovered:

In May and June, their food is mostly waste grain, sunflower seeds, and weed seeds. In late June, insects become important to them. In July, the young are fed insects only and the adults live chiefly on grasshoppers, beet webworm, and pea and grain aphids. In August, as crops and weeds begin to ripen, vegetable matter is their major food. Foxtail and wild buckwheat seeds are eaten as well as grain. Oats, barley, wheat, and sunflowers are eaten from the milk stage until they are fully ripe. This is the only period of damage.

As soon as the young are flying, blackbirds form into flocks of tens of thousands. They roost mostly in tall marsh vegetation, low trees, or willows. They must have water close to their feeding grounds, and trees for resting. Their daily activity consists of short flights between the fields, the water, and the trees.

Dr. Bird says that blackbird damage can be reduced to a minimum by planting grain and sunflowers at a fair distance from roosting places, waterholes, and trees; by leaving some stubble uncultivated as feeding grounds; and by using scaring devices.

Apparently, blackbirds may damage grain crops severely in nearby fields, but they also consume weed seeds and injurious insects. V

Don't Throw Grain Away

IT has been said often but it still needs to be said. *Tarpaulins prevent heavy losses from loaded grain trucks.* Tests have shown that 820 lb. of No. 1 feed oats were lost from a truck with a level grain load traveling at 40 m.p.h. for 10 miles, says John Howden of the Manitoba Department of Agriculture. The truck was driving into a 10 m.p.h. wind. In an 18 to 20 m.p.h. wind, over 1,000 lb. of wheat were lost on an 8-mile journey when the truck was traveling at 30 m.p.h.

Wind velocity, speed of travel, and the size-weight ratio of the grain kernels have an important bearing on losses. Flax blows off a moving truck more easily than other grains do, according to Howden.

The loss to the farmer is two-fold. If he does not cover his grain loads he loses cash immediately because he delivers less grain, and he loses even more cash eventually by spreading weed seeds. V

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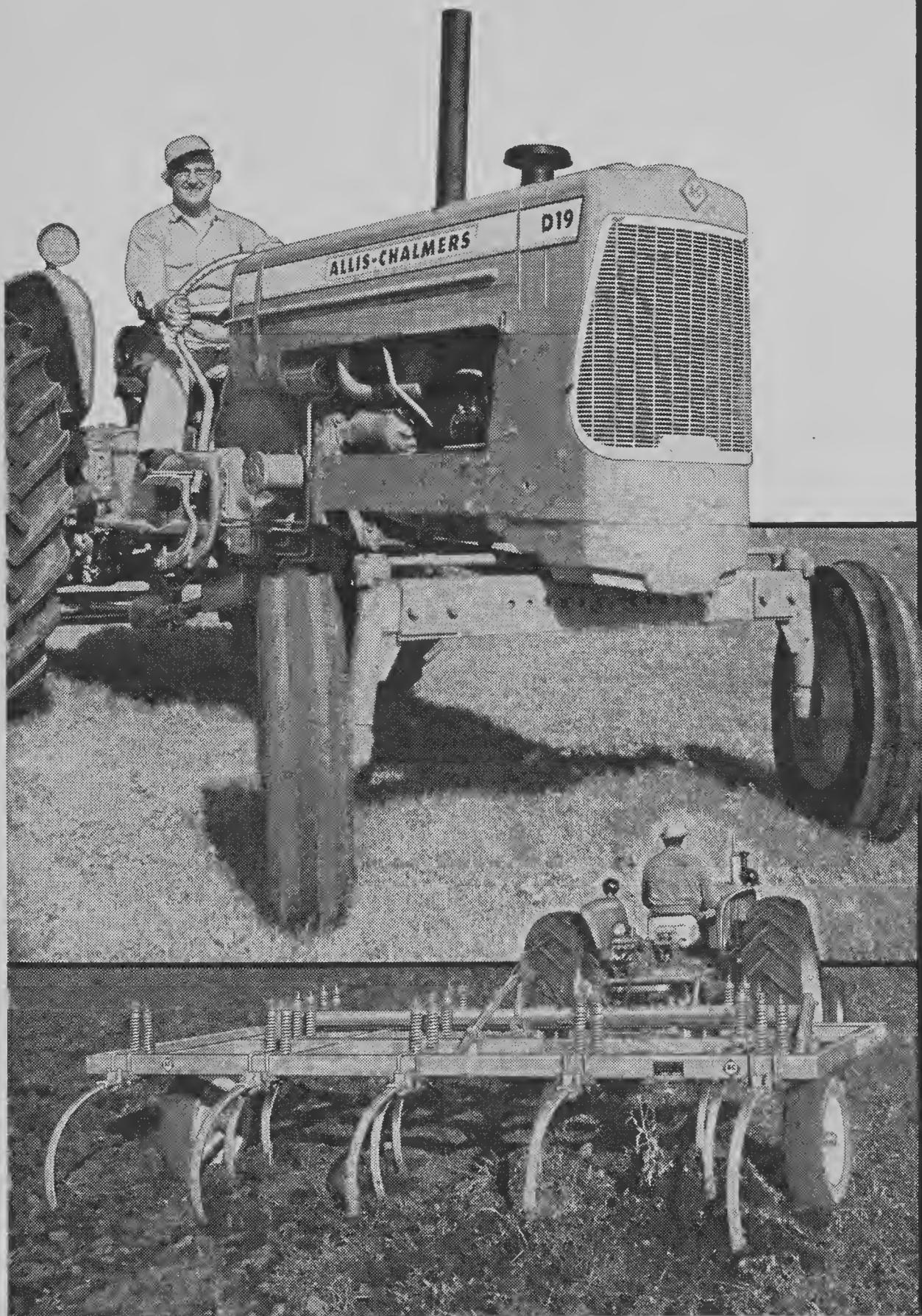
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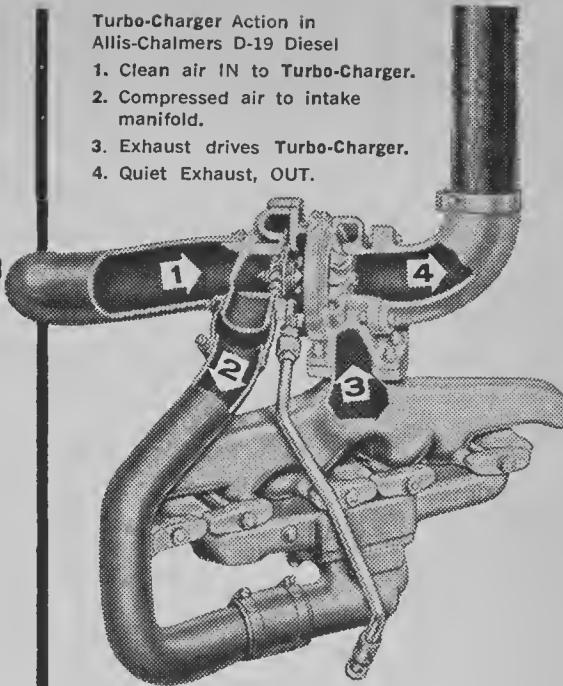
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Learn from This Year's Hay

YOU can make better hay next year if you note the quality of this year's crop and pick up any mistakes you may have made.

Stan Young of the Ontario Agricultural College says the reason for poor woody hay is that it was cut far too late. Another way to lose

quality is through leaf shatter. The biggest single reason for broken leaves and loss is bad timing of hay operations, or simply baling it too dry. Seed on the grasses and legumes is another sign that hay was cut too late.

Young points out that the best time to cut hay is when the most feed value per acre is in it—and that's when alfalfa or clover is just beginning to bloom. □



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Spraying after Harvest

CONTROL of Canada thistle can be continued after the harvest by cultivating or by spraying with an ester of 2,4-D at 1.5 to 2 lb. per acre, according to Ed Molberg of the Regina Experimental Farm. An additional cultivation may be

needed late in the fall, but late fall spraying is not reliable.

The advantage of spraying soon after the harvest, in drier parts, is that cultivation at that time might destroy trash cover and leave the seedbed loose and dry. The control program may take several years, but treatments are economical and do not interfere with continuous crop production. □



How to Improve Storage of Fruit

HERE'S a promising new way to control rots in stored fruit. At the Kentville Research Station, N.S., they have used smoke generators to apply fungicides and, as an example, reduced rot in full-grown, green tomatoes by 27 per cent.

C. L. Lockhart reports that a vented tin can will serve as a smoke generator. It should contain a mixture of potassium chlorate, lactose, atta clay, a fungicide, and a priming layer of lactose and potassium nitrate. A 750-watt electric heating element, operated from a switch outside the storage room, has been used to ignite the mixture for 5 seconds.

Captan was the fungicide used at Kentville. It was most effective at 1 gram per 20 cubic feet of storage space. Tomatoes were treated in single layers on wooden trays, and were kept for 4 to 7 weeks at a temperature of 53°.

Fungicide residues settled on all surfaces of the fruit, with the upper surfaces receiving the heaviest deposit. It took from 6 to 12 hours for the residue to settle on the fruit. □

at his disposal to cure onions sufficiently well.

The important thing to remember is that heat-cured onions keep better in cold storage. □

All Smiles



This bed of pansies in a B.C. garden reminded photographer C. V. Tench of a giggling choir of children decked out for annual school concert. Pansies were raised from seed.

Soft Rot Can Be Controlled

IF, on leafy vegetables, you see water-soaked, greasy, soft lesions, which spread rapidly and later turn dark brown and slimy, it is probably a case of bacterial soft rot. This disease occurs most often on lettuce, celery, cucumber, cabbage, cauliflower, and potatoes, says Dr. W. P. Skoropad of the University of Alberta.

On potatoes it is known as black-leg and is especially common during wet years. A soft rot develops at the base of the stems, causing the tops to become sickly. The rot turns black in later stages, and tubers often develop a soft rot at the stem end.

The bacteria causing soft rot live over in the soil or in plant trash. Doctor Skoropad recommends a rotation with crops that resist the disease, removal of infected trash, and use of clean seed as important control measures. □

Cure Onions to Keep Better

DISEASES that cause rot in storage seldom damage onion bulbs that have been dried thoroughly, or cured in a warm room after harvesting. Dr. C. Walkof of the Morden Experimental Farm, Man., reports that they have pulled onions just before the first frost and cured them at about 90°F. A strong flow of air was played over the onions for 10 to 12 days, causing the tops to wilt and dry, and allowing them to be separated easily from the bulbs.

In the next stage, loose scales and plant fragments were removed and the bulbs were placed in a dry room where the temperature was about 45°. Onions cured in that way were kept in top condition at Morden for 8 to 10 months.

Dr. Walkof says that home gardeners may have difficulty curing onions if a cool, damp fall slows the ripening. Green succulent tops and a high moisture content in the bulbs will promote spoilage by neck rot and similar diseases. The home gardener will have to use the best means

Grading Potatoes Helps Increase Returns

POTATO growers should look upon grading as an effective way to gain the confidence of consumers and improve markets. The

Ontario Department of Agriculture points out that a substantial quantity of potatoes is unsuitable for table stock or seed. To reduce the costs of marketing in sacks, and also the amount of handling and transportation, low-grade potatoes can be used locally as feed for livestock. It is equally important that such potatoes should not compete with marketable grades in the table stock trade.

It's a case of the greater the supply of potatoes, the lower the price. According to Ontario's Markets Branch, reduction of the supply through efficient grading is a practical solution to a major problem. If sales of low-grade potatoes depress the price of higher grades by increasing the total supply, the business is highly uneconomical and unprofitable for the industry. Potato growers could afford to feed or sell for feed, in certain years, the low grades and surplus at an apparent loss, and still increase their total returns from potatoes. V

Prescription for House Plants

HERE'S a formula for potting earth that will keep house plants healthy. J. Aitchison, a Canada Department of Agriculture researcher, suggests:

Two parts garden loam, one part leafmold or peat moss, one part sharp sand, and a little charcoal to keep the soil sweet. Add 1 pint of complete fertilizer or bone meal, and 2 quarts of well-rotted manure, to each bushel of soil for such plants as African violets, begonias and ferns.

Plants like amaryllis, callas, and tuberous begonias may be fed a commercial plant food in either liquid or tablet form, following directions given on the package.

Many flowering house plants grow best between 55° and 60°F., says Aitchison. African violets and other tropical plants (most of the foliage plants, cacti, and succulents) prefer a day temperature of 70° or higher, if night temperature is dropped to 60°. Flowering types require more light than do foliage plants. V

How to Banish Couchgrass

THERE is no weed killer on the market that will remove couchgrass without injury to tame grass. The only way to get rid of couch-

grass is to break up a lawn and reseed it, says W. Lobay, Alberta's supervisor of weed control.

However, you can help to eliminate couchgrass while re-establishing or building a lawn by using such chemicals as TCA. This can be used on cultivated land where roots are still underground, or on foliage with a good, leafy growth. Tall foliage should be cut to allow the herbicide to reach the soil as well as the plant. In either case, use $\frac{1}{4}$ to $\frac{1}{2}$ lb. of sodium TCA in at least 3 pints of water per 100 square feet. The rate will depend on the infestation.

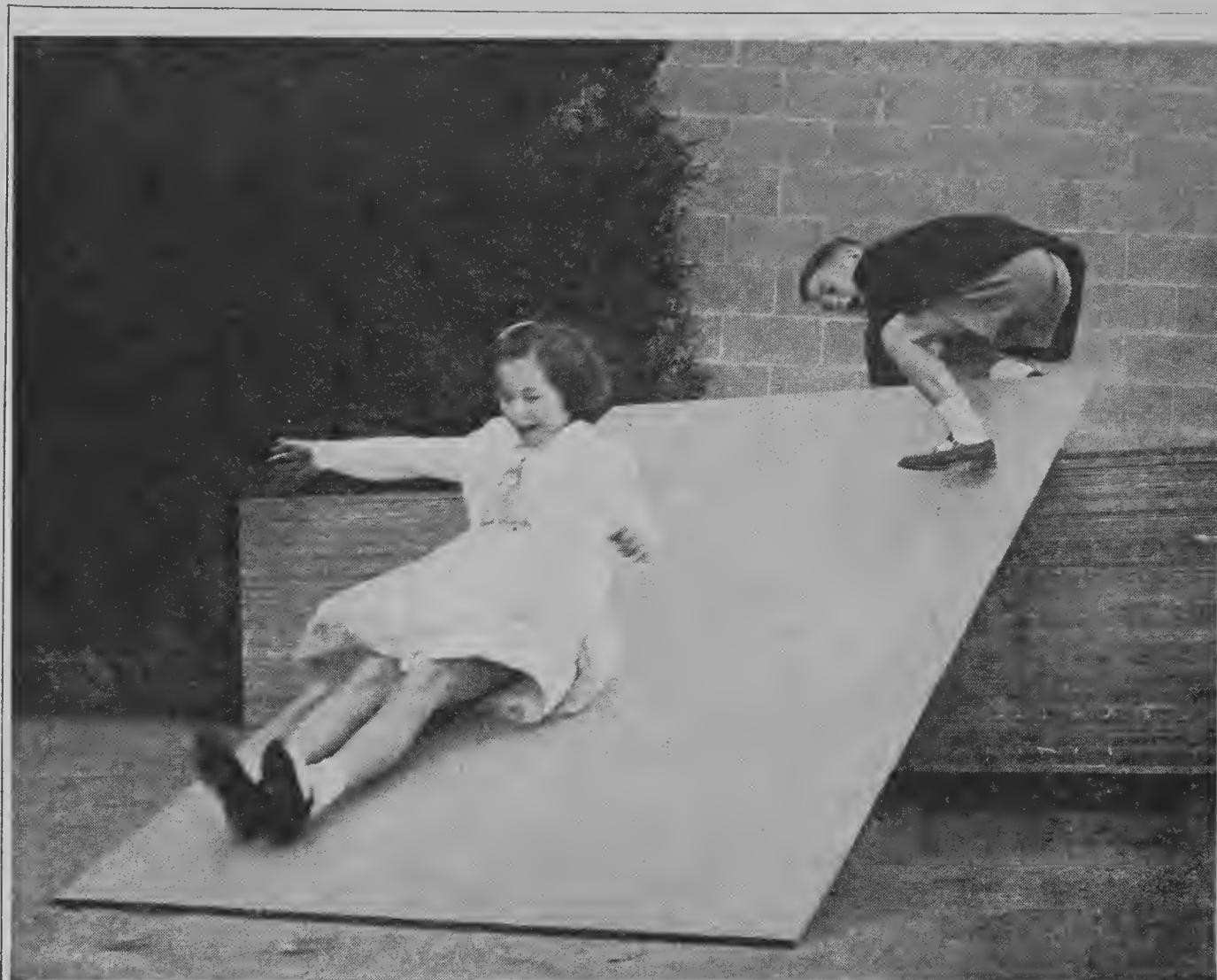
Couchgrass is best removed by herbicide application combined with cultivation. Disc or roto-till the lawn 2 to 3 weeks after TCA has been applied, and repeat the cultivation as often as new growth of couchgrass appears.

A lawn can be seeded 3 months after TCA is applied, but Lobay says it pays to make sure all the couchgrass has been killed, and he advises treating and cultivating one season, and planting the lawn the following spring. It is also worth noting that there is little danger of TCA injuring plants 5 or 6 ft. away

from the treated area because this herbicide moves only a short distance through the soil. V

Wintering Roses

FOR winter protection of roses, prune the bush back to 6 or 8 in. immediately after freeze-up. Give it a good soaking and cover with live peat moss (from tree trunks or muskeg). Put a plastic cover over the mound and anchor it with earth. Leave it until spring thaw, says P. D. McCalla, Alberta's supervisor of horticulture. V



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COUNTRY WORKSHOP

Remote Control Button

This has proved very useful when hauling water for spraying and one has to hold a hose and stop the gas engine at the same time. But its chief advantage is on a grain auger, if the button is attached to either end of the auger barrel, and it avoids a hasty run to stop the motor when the load of grain is full. To set up the remote control, drill a hole in the breaker point cover, attach a 2-wire electric cord—one wire to ground, the other to the breaker arm wire. Use about 20 ft. of No. 18 cord and attach the button switch (as used in some cars) to the other end. A 6 in. band-iron clamp will hold it in the required position on the auger barrel. —W.E.L., Sask.

Weather-Tight Door

To make a door weather-tight, cut off $\frac{1}{4}$ in. at the bottom, and cut a groove, $\frac{1}{16}$ in. wide and 1 in. deep, along the center line of the bottom of the door. Cut a strip of rubber from an old tire tube, $1\frac{3}{8}$ in. wide (the width of the door) and glue it in the groove so that it hangs $\frac{3}{8}$ in. below the door. When you shut the door, the rubber bends over and makes it weather-tight. This also works all round the door.—S.G.S.W., Alta.

Adjustable Gate

This is a system that enables you to raise a gate when the manure pack or snow builds up. Take a 9 ft. length of $2\frac{1}{2}$ in. pipe and set it in a 2 ft. cube of concrete sunk in the ground. Then slip a length of 3 in. pipe over the thinner pipe, and attach it to the gate. This is held at a given height by a collar with a set screw. The collar is made from a 2 in. length of the 3 in. pipe with a hole drilled in it for the set screw.

If you have a metal gate, you will need hook-hinges, as shown in the sketch. Now, when you want to adjust the height of the gate, loosen the screw, slide gate up or down, then tighten the screw again. —H.T.S., Man.

Shelf Supports

Fence staples can be substituted for supporting strips when placing

shelves between studs. Simply drive in two rows of staples to support the ends of the shelf, using the top row to prevent tilting.—H.G., N.S. ✓

Waterproof Light

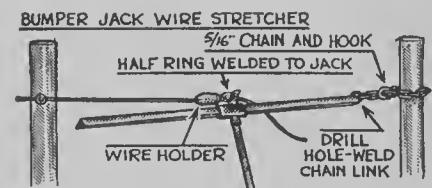
If you need to find tools lost in a cistern or a small well, seal a flashlight and some heavy objects in a fruit jar. Old bolts are very suitable as weights. Attach a string or wire to the jar and then it can be lowered into the water with safety. —E.E.W., Alta. ✓

Vise Repair

A vise with worn grips need no longer be thrown away. An old wood file can be cut to the proper length and holes marked and drilled to fit the vise. The holes should be countersunk so the new grips can be fastened flush on the jaws of the vise.—E.P., Sask. ✓

Wire Stretcher

I have used a bumper jack, as shown in the sketch, for stretching wire for electric fences, and find it better suited to the job than a block and line. The jack can still be used as a jack when needed, as the pieces



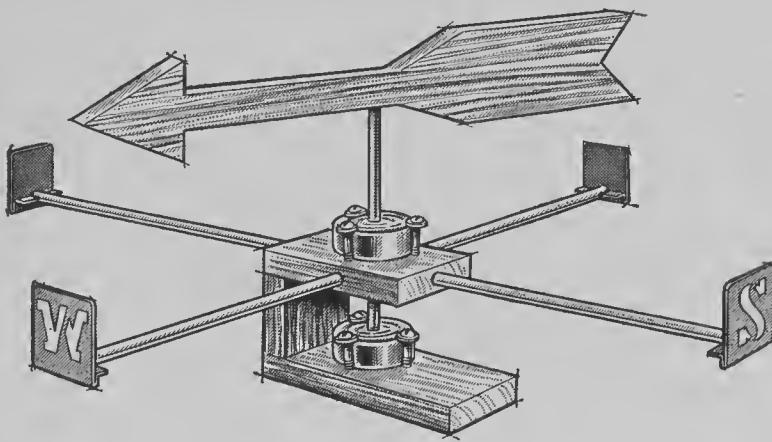
welded to it do not interfere with its operation. The wire-holder can be bought at any hardware store for a couple of dollars. As you can see, a $\frac{5}{16}$ in. chain and hook are needed to go around the post, and a hole is drilled at the top end of the jack where the chain link is welded. A half-ring is welded to the traveling part of the jack and the wire-holder is attached to this. The base is removed from the jack.—J.P., Ont. ✓

Pipe Block

Here is an inexpensive and handy block designed to use when lifting a stand of pipe from a shallow well or cistern. As can be seen in the sketch, the device is made from 1" plywood and a heavy strap hinge, and it will hold the pipe as it is being drawn out.—A.W., Alta. ✓

Be Your Own Weatherman

Wind Direction Helps Foretell Weather



Instrument made from scrap materials, including roller-skate wheels.

IT'S possible to foretell future weather by taking note of the wind direction and combining it with other weather signs. The meteorological branch of the Canada Department of Transport has designed a simple wind-direction instrument which can be made with a few basic materials.

If you want to try it, take some $\frac{3}{4}$ " by 3" lumber and cut it into 4 lengths—7" for the base, 3" for the upright, 4" for the bracket, and 16" for the arrow. You'll also need 2 roller skate wheels, 6 large-headed 1" to 2" screws with washers, 5 dowels of $\frac{1}{4}$ " by 8", 4 pieces of metal about 2" by 2" for the letters, and glue.

Cut out the arrow, making the tail much larger than the head for best results. Find the point of balance of the arrow, drill a hole there and glue a dowel into the hole. Drill $\frac{1}{2}$ " hole through top of bracket and half-way through base. Fasten skate wheels over each hole with 3 screws. Force dowel attached to arrow through holes of wheels so that bottom of dowel doesn't quite touch wood base; wax end of dowel to avoid binding. Glue remaining dowels into holes drilled in sides of bracket. Paint N, E, W and S on metal squares and tack onto dowels.

The instrument should be set up where it's clear of wind obstructions and well off the ground. If possible, line up N with the North Star. A compass may be used, but bearings will be magnetic rather than true.

The arrow will point into the wind, indicating the direction from which the wind is blowing. You'll find that cloud, rain and snow do not always come from the direction of the wind, but experience will teach you which wind directions are most likely to bring fair weather, rain or snow. V

New Tractor Power?

IT may take a while yet, but tractors with gas turbine engines are definitely being considered. The

Patents and Inventions

What happens when somebody develops a bright idea

by A. WEAVER

ONE of the Walter Mitty dreams of many people depicts them reveling in riches, the proceeds from some simple invention that they patented and sold to a beseaching business firm for a king's ransom.

While the magic word "patent" appears to spell early retirement and easy living, this is a somewhat erroneous concept. With Canada issuing patents in the 900,000 number range at present, we still seem to lack quite the number of millionaires that these figures would indicate. It might be assumed that there is many a slip 'twixt the patent and the bank.

What, then, is an invention and what is a patent?

An invention is any (1) new, (2) useful, (3) unobvious process, machine, manufacture or composition of matter, or an improvement thereof.

Having been the first to devise an item that fulfills the foregoing requirements, a person may apply to the Commissioner of Patents at Ottawa for a patent covering the subject "art." An application includes drawings of the invention, a specification fully describing it, a claim or claims as to what is new about it, an oath prescribed by law, and a filing fee of \$25. If a search of previous patents by the Commissioner shows that the item is indeed patentable, he will award a patent to the applicant. This patent grants him an exclusive right to prevent all others from making, selling, or using the invention without the express consent of the patentee for a period of 17 years.

(Please turn to next page)

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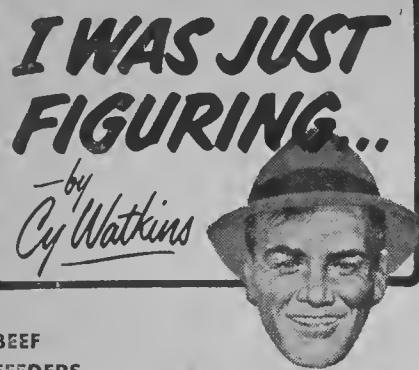
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(Continued from preceding page)



BEEF
FEEDERS
What About Vitamins?

It wasn't too many years ago that most nutritionists said it wasn't necessary to supplement beef rations with extra vitamins . . . that natural sources provided "enough."

The trouble with their theory was that it didn't hold up too well in feedlot tests. In trial after trial, the animals that got supplementary vitamins did better. Often it showed up in faster gains, or better feed conversion, or possibly better health.

This led nutritionists to take a new look at their theory, and they found out that conditions are apt to occur in a feedlot that kind of put a new light on things.

For instance, take Vitamin "A." Why do you need a supplemental source of Vitamin "A"?

First: Vitamin "A" oxidizes easily. Roughage that was loaded with Vitamin "A" 6 months ago may have little or none now.

Second: Now there is a great deal of evidence that roughages grown under certain conditions may have a high Vitamin "A" content, but it is "locked up," chemically, so it is not free to be used. So while a chemical assay may show plenty of Vitamin "A" . . . a biological assay may indicate there's not much available. You might say it's there to look at, but not to use.

Third: Much evidence now suggests that ruminants need to be in a Vitamin "A" positive condition to be able to convert carotene into Vitamin "A" efficiently. So if they go into a feedlot short of Vitamin "A," this very fact prevents them from fully utilizing the carotene that is available.

But in each of these three situations, Watkins Vitamin "A" (available in Watkins Vitamin Supplement, as well as in Watkins M-V Special) provides the answer. (1) Watkins Vitamin "A" is protected against oxidation. (2) Watkins "A" is available . . . not "locked up." (3) Watkins "A" availability is not limited by the condition of the animal. Even a very deficient animal can utilize all of it.

But in the case of Vitamin "A," as in the case of other vitamins Watkins recommends for Beef, you don't have to be a nutritionist to appreciate the evidence you'll find when you give it a test in your own feedlot.

Your Watkins Dealer has the recommendations and the products to help you make a good ration a lot better with Watkins vitamin and mineral fortifications. You can either use two products . . . Watkins Stock Mineral (to provide the necessary major and trace minerals), and Watkins Vitamin Supplement (to supply the vitamins) . . . or in cases where debilities exist, you can use Watkins M-V Special for Stock (supplying the Minerals and Vitamins together, in one product).

The Watkins program for beef feeders pays off handsomely . . . in gains, feed conversion and health. I hope you'll talk it over with your Watkins Dealer, next time he calls.

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HOWEVER, rather than tarnish the magic aura of inventions let us look at some interesting facts about them and their inventors, many of whom did indeed make fortunes. An interesting sidelight to this is that many inventions are entirely outside the field of their originator.

In 1844, a physician named Charles Goodyear invented a process for making natural rubber tough and resilient. This process employed sulphur and, as its fumes were associated with volcanoes and Vulcan, the god of fire, it was called "vulcanizing," and the world started its rapid roll to modern times on rubber tires.

Other well-known inventors were earning their livings outside the field of their inventions when the great idea struck them. Eli Whitney, of cotton-gin fame, was a school teacher. George Eastman, who gained the patents that started Kodak on its way, was a bank clerk. Isaac Singer, who started the decline and fall of the thimble, was an actor. Alexander Graham Bell was a teacher of the deaf, which led indirectly to his discovery of the telephone.

Almon B. Strowger, who invented the dial telephone exchange in 1895, was an undertaker who thought that a rival mortician had bribed the local operators to bungle his calls, so he devised a girl-less exchange.

With Canada heading for its millionth patent, and with the United States having just passed the 3 million mark in 1961, there seems to be no dearth of ideas. Yet in 1844, Henry L. Ellsworth, the Commissioner of Patents for the U.S. said in his annual report to Congress:

"The advancement of the arts, from year to year, taxes our credulity and seems to presage the arrival of the period when human improvement must end." He then went on to recommend that the Patent Office be shut down as everything of importance had already been invented.

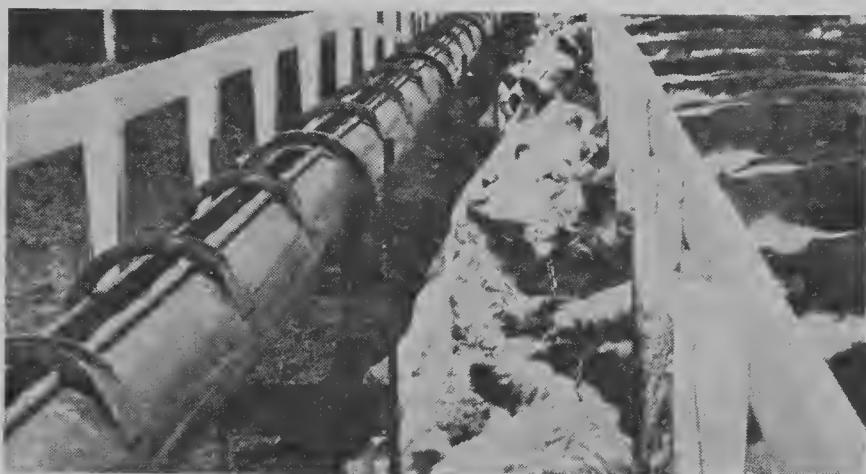
It would appear that he was not too far-sighted an individual. Despite his pessimism, people have continued to come up with safety pins, paper clips, and digital computers because human beings are a restless breed and there is sure to be a "better way" just around the corner. V

Not a Cow Pony

DO you take the risk of using your tractor as a cow pony? The Ontario Department of Agriculture says that hundreds of farmers allow their school-age children to take the tractor for the cows. And rough, hilly pastures, groundhog holes and dead furrows present hazards that young people should not be called on to handle. Recently, a 14-year-old boy lost control of a cow-pony tractor and was almost killed when it tipped over. V



Tube Feeder



This tube rotates and dumps the feed through a slot into all sections of the feed bunk at the same time, so that crowding and pushing at the feed bunk are reduced. Auger distributes feed through tube and dumping is repeated as often as needed. It will work from an automatic timer. (New Holland) (389) V

Aluminum Coating

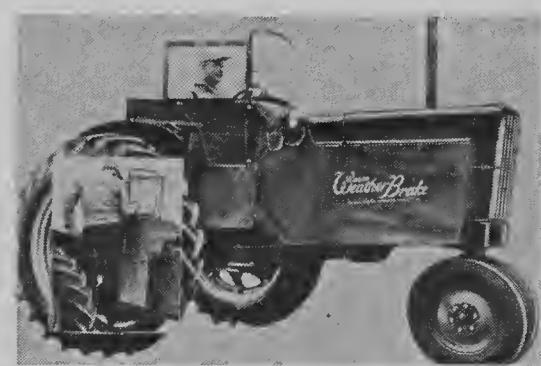


Known as Alumanation, this mixture of asphalt-gilsonite, asbestos, oils, and aluminum can be painted on all metal and masonry surfaces. It reflects 50 to 55 per cent of sun's rays, reducing interior temperatures 15° to 20°. It is also waterproof, long-lasting, and expands or contracts with temperature changes. (Republic Powdered Metals) (390) V



Heater Cab

The increased popularity of side-mounting tractors has created a need for heaters with a side-door opening. The "Weather Brake" line of cab heaters is being adapted for new tractors to fit the framework, windshield and canvas closely, in addition to designs for older models. (Hinson Manufacturing) (392) V



For further information about any item mentioned in "What's New," write to WHAT'S NEW, The Country Guide, 1760 Ellie Ave., Winnipeg, 21, Man. Please quote the key number that is shown at the end of each item.

NEVER A SEVEN



I RECKON there's not many that's heard of Burnscombe, down by the Eggesford Vales. Seems folk only get to know about the big places where the buses go; or the old places, where the ruins stand; or the important places, where all the business and pomp-and-palaver goes on. Burnscombe's none of these. 'Tisn't big, for you won't find more than a thousand of us living there, even if you look in at the Wagoner of an evening. 'Tis old, but we haven't got any ruins: all our walls and windows are in fair shape and keep off the rain as they're meant to, though Farmer Burgess' barn won't stand up much longer if he doesn't brace it somehow. And 'tisn't important, our Burnscombe isn't, except to us; and that's all we worry.

To us it's a fair place, and if there's nothing about it that would look very startling in a history book, or recommend it to any o' your tourists and travelers—and other such folk who can't sit still for the life of 'em — there is one thing about Burnscombe that puts it above most of the places round about.

It's the clock. The clock in the tower of Vicar Briggs' church.

It don't matter about your Summer-Time or your Greenwich-Mean-Time or your High-Tide, Low-Tide, Leap-Year or Early-Closing—that clock is the most accurate piece of manmade machinery you ever did know about; and if you didn't, well, then, here am I telling you. . . . I don't care if it sounds like boasting and bragging, but I've been outside that church of an evening in the summer, when old Mrs. Fletcher's had her wireless turned on and her window wide open so any that's coming by can hear the News. And I've heard the six pips float out o' that window, and before the last one's sounded, why it's drowned by the chiming o' that clock up there. And it's the *sixth* pip that counts, mind, just as it's the *first* of the chimes as counts, so there's nothing slipshod and slaphappy about it. I was even there once when the pips was all behind a full five seconds late, they were, and

by ELLESTON TREVOR

Illustrated by PIERRE

Vicar Briggs' clock wasn't half telling them about it, too, ringing and booming fit to break the hammer. . . .

But then it isn't the Vicar's clock, be rights; it's Jim Pugsley's. He's the one who looks after it, like he does the Squire's grandfather clock, and the one in the Village Hall, and Mr. Brinley's mechanical mincer down at the Stores. Do anything with a delicate piece o' machinery, can Jim Pugsley.

And his highest pride is that clock up there—because there's none in the village who can't hear it, day or night; and there's none in the place as wouldn't go straight to old Jim and tell him what they thought of 'un, if that clock went a minute wrong for any reason.

EXCEPT Bob Warren, maybe. Maybe he wouldn't worry overmuch; because he's got a clock of his own, that wakes him every morning on the dot. It's a queer sort o' clock, I'll grant you, because it's got four legs, four wings, two beaks and a couple o' smart black tails . . . it's a pair o' jackdaws. Bob Warren's our postman; and he's a few other things besides bird lover among 'em. All sorts o' birds come round his little patch o' garden, back of his cottage: thrushes, robins, blackbirds, tits, wrens—and this pair o' jackdaws; and they're his favorite friends.

Every morning they come, summer or winter, for the past two year, pecking at his windowpane at a quarter to seven sharp for their breakfast (and how they work out British Summer Time, why, none of us rightly knows.) They're Bob Warren's alarm clock, and they've never failed him yet—or they hadn't, till last week.

Last week, something happened in Burns-

combe that's going to be talked about at the Wagoner till the youngest of us gets too old to remember. . . . Last week, on Tuesday morning, Bob Warren's jackdaws flew away.

They just didn't come pecking at that window of his at fifteen minutes to seven: and a proper old mess that put him in! He slept on until near eight o'clock—which goes to show the trouble a folk can have when he relies on something for so long that when it lets him down, well, it lets him down with a bump.

Come eight o'clock, Bob Warren was running round his bedroom with his shirt on inside-out and his collar studs under the wardrobe and his socks on wrong-way-round while he tried to cut his throat shavin' at the same time as he was struggling into his trousers back-to-front. . . .

(Please turn to next page)



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PO-62-2C

Come half-past eight he was wobbling down the lane on his bicycle with a bag full o' letters an' parcels nearly an hour behind—and if Widow Coomber hadn't dodged inside of her gate again in the nick o' time she'd have been bowled over as clean as a skittle as Bob Warren went skiddin' and swervin' between them hedges fit to tear all the leaves off and make the place look like Autumn out o' joint. . . .

THE whole lot of us—or them as could expect a letter with their breakfast—was proper upset, that Tuesday morning, to see old Bob spinnin' round the place in such a state. But there was one chap who went and laughed his head silly—and he was Jim Pugsley, who looks after the Vicar's clock.

"Well, Bob Warren," he says when the dust has settled and there's a minute to breathe in, "if that won't teach you to wake up by a good Christian timepiece, like the rest of us do, then nothin' will!"

"Them jackdaws," retorts Bob, still short of his breath, "been wakin' me up these two years, an' never missed, as yet."

"As yet . . ." laughs Jim Pugsley. "There's a time comes for everything, true enough; and any man as'll let himself trust a pair o' birds-of-ill-omen to wake him of a morning is goin' to find hisself in much the same pickle as *you* did today!"

"Birds of ill omen!" snorts Bob Warren, "They're the best friends I got in my garden, they are!"

"And a good turn they done you this mornin', didn't they then? Birds o' the devil, them jackdaws is, as you've discovered for yourself! You won't see them again—so if you want my advice you'd best keep one ear on the church clock when it strikes seven in future!"

"Seven's too late to rouse me!" retorts Bob Postman putting his trouser clips on with a trembling hand.

"'Tis not so late as eight . . ." grins the old clock-maker; and to that there wasn't much his friend could say. He took himself off, without another word—for he knew, right down inside him, that tomorrow morning he'd have to listen-out for that clock, at seven when it chimed, in case them birds had gone for good.

There was no pecking at his window, next morning. He listened out for the clock instead.

But there was no clock, either.



"Could I exchange this home barbershop set for a bottle of hair restorer?"

BOB had wakened long before the dawn, what with losing sleep over his lost jackdaws, and the mess he'd been in yesterday, an hour behind with the post. He'd lain awake while the sun came up, and he'd heard that old clock telling four, and five, and six, chiming through the village with its clear bright bell. But nobody heard it tell seven when the time came.

Bob was up soon after, wondering if his ears had done him wrong, but it wasn't until after he'd got round with the early delivery that he had the time to learn what had happened.

It was the impossible that had happened. It was the unthinkable, the incredible, the unheard-of that had happened. Jim Pugsley's clock had stopped. . . .

It had stopped at ten minutes to seven; and in our village that Wednesday morning there were more shirts on inside-out than bears thinking about; more socks on wrong-way round than I dare tell of; more trousers on back-to-front than you'd ever believe. . . . And Jim Pugsley was the first to hear about it—and the last.

"I think," said Bob Warren cheerfully, "I think I'd as soon rely on my pair o' jackdaws than on any mechanical gadget full o' cogs an' wheels an' wires an' *that* sort of novelty. . . ."

Jim Pugsley watched his friend away, down the lane on his bicycle, his last word floating on the morning air. Novelty. . . . Novelty! . . . A clock that'd been up there on the church these hundred years, telling the hours by day and night, week and month, season in and season out and generation after generation—novelty. . . .

BUT Jim had more to do with his time than get upset about what his friend the postman had said about his clock. He was up in the tower with his bag o' tools long before the sun was warming the tombstones round the church. He worked until mid-afternoon, and went without his meal—checking over, oiling, adjusting and cleaning, setting and tapping about—and when he came down he had something in his hand. Come evening, he showed it to the lot of us, at the Wagoner. It was a brown hen's feather. "Never think, would you," he asked us, "how a little accident"—("accident," mind . . .)—"how a little accident like that could upset a delicate piece o' machinery?"

Just a hen's feather, between the wheels, or wherever he said it had been. Well, that wasn't any fault o' Jim Pugsley's, though Bob Warren gave us a wink and asked him how long he'd had them chickens nesting in his clock. . . .

No; the clock was all right—Jim knew that, better than any of us. He'd cleaned and oiled and checked every part, and the works were as good as new. We were all prepared to remember the matter as a queer coincidence: only once had Bob Warren's jackdaws failed to wake him, and that was on the Tuesday. Only once had the church clock failed to wake the lot of us, and that was on the Wednesday. Things o'



that nature often went in pairs; and this had been one o' them.

ALL through Wednesday evening and Wednesday night, that clock went round as smooth and accurate as it had done for years, telling the chimes hour after hour until most of us were fast in our beds and snoring. And in the morning, those of us who were up that early heard the chimes again—four, and five, and six, and—

And never a seven.

I happened to be nearby meself, that morning, and I went across to the church and stared upwards. I knew, by me own watch, that it was now a good quarter-past . . . but them iron hands up there showed ten minutes to, as bold as you like.

"Jim Pugsley!" I called through his window as I went on me way down the lane, "that clock o' yours has gone broody again overnight — you'd best throw a bucket o' water over it, soon as you can!"

Jim Pugsley awoke to a nightmare. . . . He just couldn't bump into anyone without meeting a wide grin on their face—which was more than he deserved, for many of us had got into a proper state again this Thursday, what with oversleeping and cutting our cheeks an' chins an' throats with shaving by jet propulsion, as you might say, all because that Jim Pugsley couldn't keep his old clock going. . . .

He was in a frenzy. With his bag o' tools and his long ladder he was up in that tower before most on us were sitting down to our breakfast; and before noon that clock of his was down on the ground — and it weighed more than you'd want on your favorite corn in a hurry—and he was making a work bench of the biggest paving stone in the front pathway of the church, spreading his wheels and cogs and ratchets and spindles all in a neat array, while the sun came up the sky and sent him the brightest light he could wish for to work by.

A GOOD few were past there, during the day, to watch how he was faring; and most o' the afternoon old Vicar Briggs was there, standin' over Jim Pugsley and talking and asking questions and poking at the heap o' gadgets with his walking stick and complaining about the clock and pointing out that the pathway of a holy house wasn't the proper place for setting up a clockmaker's workshop—until Jim Pugsley could scarce make out what he was doing himself, and if the Vicar Briggs hadn't been

a holy man why, he'd have heard things about himself that Thursday afternoon that he never would have believed. . . .

By evening, the clock was back, sitting up there in the tower as bright as brass; and there was not one single part of it that hadn't been examined, checked, tested, cleaned, adjusted and set by the expert hands of the best clockmaker and mechanic in all of our village — Jim Pugsley himself.

Come nine o'clock, the chimes rang out, as they'd done for a century. Down at the Wagoner we gave a cheer, and said that tomorrow morning there was going to be time—at last—to get up slowly, and shave without loss o' good blood, and put on our trousers the right way round as decent Christians should.

No one looked forward to this more than Bob Warren the postman; for since Tuesday he'd not had the means o' waking hisself up in time to snatch his breakfast. There was no peckin' of them jackdaws at the window; and there was no chimin' o' that clock in the church: what was a poor postman to do?

But the clock was back in the tower, telling the time o' night — from nine to ten, eleven to twelve, and then we lost count until next morning because we were fast in our dreams. Come four, come five, come six, come —

Come seven there was a silence over the place: for the clock had stopped, at ten minutes to.

JIM PUGSLEY was a laughing-stock. We'd have a man in from the town, we said, to fix his clock for him. We'd ask Mrs. Fletcher, nearby the church, to leave that wireless of hers going all the night, so she could tell us the time in the morning. And soon after breakfast, some wit had upped and put a present for Jim Pugsley right in the middle of his front garden: it was an old sundial. . . .

Jim said nothing. He didn't go rushing up to that tower o' his, either. He knew what he'd done to that clock; and he knew there was nothing wrong with it. So he was prepared to wait, till tomorrow morning, to see for himself whether it were magic or devil that were getting into that clock at ten to seven every day. I happened to be a close friend o' Jim Pugsley, and he told me what he was going to do. He was going to climb into the tower about six o'clock in the morning, and he was going to wait till seven: and then we'd see what we should see. . . .

All right, I'd be there with him. We waited, next morning, from six until quarter to seven—Jim sitting up in that tower on top of a great long ladder, and me coolin' me heels in the churchyard below, staring up at the clock. As I paced up and down, glancing upward every few minutes, I began feelin' almost nervous; because I knew myself that old Jim had got that timepiece as perfect as could be; and it just wasn't natural for it to keep stopping at the same time of a morning.

At a quarter to seven I heard a sound from high up; and I jumped in me boots and craned me neck so

quick that I near ricked it. Up there, sitting on the big hand of Jim Pugsley's clock was—a bird. It must have hopped out of the nest it had built, among the rafters a little higher in the tower. And by the way it sat there on the big hand, preening and prinking and cocking its eye at the view, I could tell it wasn't the first time it had done it. No, this was its perch: this was where it upped an' sat first thing of a morning, to wash and brush up and take a good look at the world before the day began. . . .

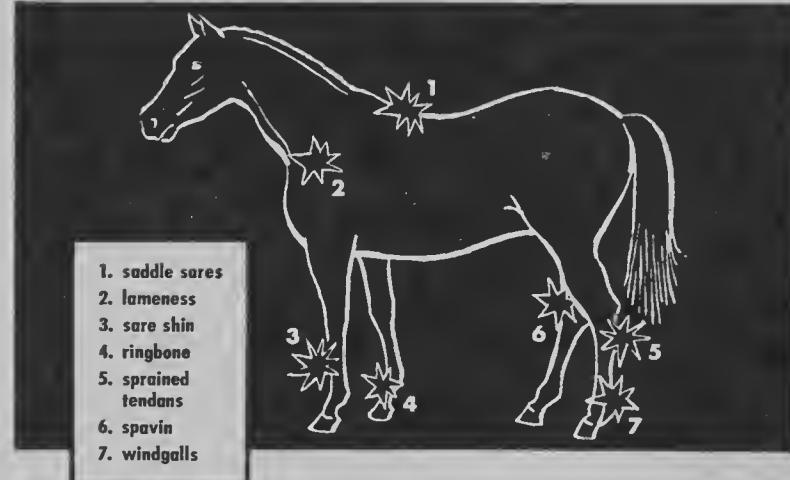
For five minutes I must have stood there, while the big hand crept up from fifteen to ten minutes to the

hour; and at ten to it stopped. The weight o' that bird had taken just five minutes to stop the mechanism.

SO there it is. . . . Few folk have heard o' Burnscombe, yet we've got the most accurate church-clock in the whole of the West Country for there's never a one that's had more attention. Even when it didn't need it. We're all up betimes these days, same as we always were, because that bird—and his mate with him—has been coaxed away from that new nest in the tower, back to Bob Warren's garden where they were before.

Works o' the devil, jackdaws are. You ask Jim Pugsley. V

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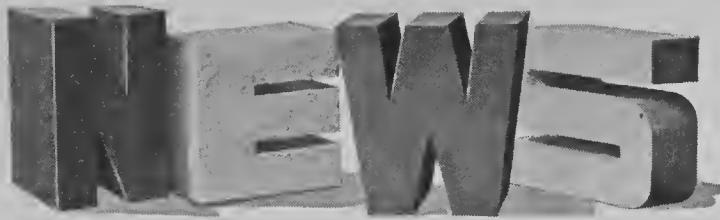
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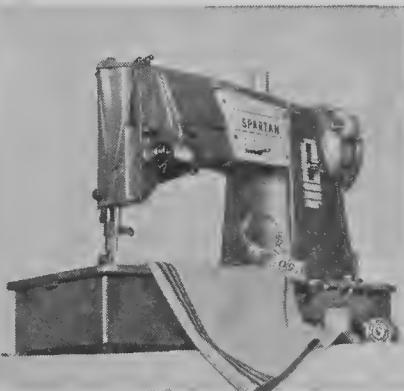


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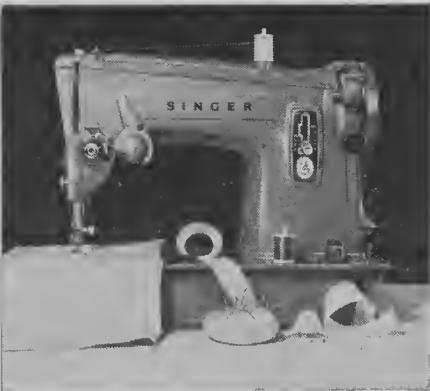


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Let's Think It Over

by THE VERY REV. M. L. GOODMAN



Something New Has Been Added!

"Something new has been added!"—that's a slogan used to advertise a certain product. (I'm afraid I've forgotten which one.) It's evident that something new has been added to The Country Guide. We hope that this new addition will be of use to you. Its primary purpose is neither to divert nor to entertain but to set the reader thinking for himself. The thoughts which really help us, convict us, rebuke us, are the thoughts we think ourselves. Whatever we read may be enjoyable or interesting, but it remains apart from us until we begin to think about it as personally significant.

Day by day we are subjected to a great bombardment of ideas, of all sorts, and from all directions. We let only a few of them in to become part of our own thinking. I hope that now and then some of the ideas set forth here will find a home with you.

Some of you are old friends through the radio. I'm grateful for this new opportunity to speak to you from this page of The Country Guide. I pray and intend that there shall be nothing here contrary to the Apostolic Faith and the ancient Gospel. *These paragraphs should bear on one controversy only—the "controversy" which must be settled between ourselves and God.* You may suggest that "controversy" is not the right word; but perhaps it is, for "controversy" is derived from two words—"contra"—"against" and "verto"—"to turn." Essentially, then, "controversy" means "turned against."

This implies that controversy can be one-sided. We may be sure that God is not "turned against" us. We may be equally sure that in some ways each of us is "turned against" God. Whatever leads us out of this controversial attitude, even by a small degree, may be regarded as good and useful.

May this be true of "Let's Think It Over," and may God bless this new relationship between you and me.

Suggested Scripture: Micah VI, 1 to 3, and St. Matthew XVIII, 1 to 4.

Man Overboard!

My brother had gone for the week end to one of the resort hotels in the famous Muskoka area. As the hotel was on an island, the last part of the journey was a short passage by boat. All went well until the return trip. A short distance from the mainland the boat caught fire. My brother and his friends had to jump into the water to escape the flames. As they were so close to land the situation didn't seem serious, especially since they were all good swimmers—all except one man. He very nearly drowned.

He wasn't a big fellow, but he seemed unusually awkward and hard to manage in the water. (Of course this was all happening in seconds.) In spite of the best efforts to help him, he went under several times. Then they discovered that he had his brief case in one hand and his suit case in the other!

Like that man in the water some of us hang onto our luggage—things that we will have to let go before we can ever get to God.

Suggested Scripture: St. Luke, Chapter XV.

Harvest Festival

All the other farms in the township had boasted of substantial houses for at least a generation. Here alone stood the original log house with its three small rooms. The stove was propped up with a couple of bricks and the floor was a succession of heaves and hollows, as the sills had rotted long ago.

The farmer was the son of the first settler. The pioneer father must have worked hard to establish the homestead and build the home. Nothing much had been done since his time, for the son, now an old man, had always been "shiftless." The farm, in its present condition represented the story of his life. It spelled failure where failure was inexcusable, for the land was good and all around were stories of success.

The man was shiftless, but his wife was not. She had done her best under the most frustrating conditions. I honor her because she was never known to complain. Certainly, she never disparaged her husband, nor made fun of the great things he was going to do "tomorrow." Such as it was, her house was always tidy and clean, and it was said that she did most of the milking and a lot of the other chores.

One day I found her in tears. This was so unusual that I asked what was wrong. "Oh, Mr. Goodman," she said, smiling through the tears— "It's just I'm so happy. This is the first time since we've been married that we've had enough extra cash to buy fruit." She pointed to a dozen or so gleaming jars of peaches on the kitchen table.

She told me that before this she had only been able to "put down" the wild berries which she had picked herself.

I always think of her at harvest time. This was her Harvest Thanksgiving.

Suggested Scripture: Deuteronomy VIII.

Home and Family

The Country Guide's Magazine for Farm Women

"I SEW for economy," Margaret Zoeller says, "and because I enjoy it too. But if you can do it cheaply and look well, it's really worth it."

Both Mrs. Zoeller and her daughter, 16-year-old Jayne, look well indeed in the outfits she sews for them. So for her, home sewing is definitely worthwhile.

Several months back, I was given a private impromptu fashion showing in the Austin Zoeller farm home in Waterloo County near Kitchener, Ont., and a commentary by the seamstress-models.

Mrs. Zoeller sews suits and dresses and occasionally a coat for Jayne and herself. Both are long-waisted, so besides economy, home sewing provides them with clothes adjusted to a proper fit through cutting bodice pieces 2 inches longer than pattern size. Mrs. Zoeller's sewing and her own growing skill are a special boon to Jayne, offering a much broader styling selection than if she had to depend on ready-made clothes in her petite size 5.

The benefit to Austin Zoeller and son Bob, 14, is largely in pride. His mother did sew clothing for Bob when he was small, but stopped when he passed the overall stage.

Margaret remembers sewing a little in school, but only started sewing seriously after she was married. "We bought a machine and I took the course offered with it. That teacher really had a knack for getting across the essentials," she says of that instruction. Since then, Margaret has found she learns something with each garment she sews. More recently she has picked up pointers from two club courses Jayne has taken in 4-H.

"For cottons I go into the Kitchener department stores," Margaret told me, "and any time we're in Toronto I generally find time to shop for fabrics. When I'm buying yardage I buy the pattern first so that I won't find myself with just half a yard of a material left. If I have fabric left over (and sometimes I allow some extra) I make or cover a hat with it to match the outfit."

Lightweight wools are popular with Margaret Zoeller. She and Jayne wear them often so she is happy to make her biggest saving in the wool garments she sews. She is able to pick up very good values in remnants from a woolen mill at Hespeler and has made skirts of good quality woolen fabrics for a total cost of \$1.50.

What does Mrs. Zoeller do with the money she saves? Any homemaker will know it isn't that simple. By shrewd buying and developing her sewing skill she is able to give her own and Jayne's wardrobe more variety. Money which otherwise might have been spent on clothing is available for remodeling their rambling brick farm home, for extras during their summer tenting holiday, and for various family needs and wants. ✓

S for Sew and Save



Guide photos
An ironing board just behind her chair makes press-as-you-go sewing convenient in Margaret Zoeller's upstairs sewing room.

by GWEN LESLIE



Margaret varies her green-brown tweed suit of fine wool with a scarf, blouse and jewelry.



Beige binding trims Jayne's soft green suit; mother models her black and white fall coat.



Margaret made green cristalette dress, matching hat; Jayne's school dance dress with net overskirt.

Homemakers' Hints

Sew two terry towels together along three sides and insert a piece of foam rubber to make a soft bath mat which can be easily washed. —Mrs. William Fyson, Struan, Sask.

* * *

Save all small plastic pill bottles with snap-on lids to send ketchup, mustard, etc., along in lunch boxes. —Mrs. Yvonne Kientz, Okotoks, Alta.

* * *

Cut up old plastic tablecloths and curtains to cover cushions that come in for a lot of hard usage. This is ideal for tractor cushions. —Mrs. Evelyn Nienkirchen, Pembroke, Ont.

* * *

To dust hard-to-get-at places such as the dials on phone, TV and radio, I use a small paint brush. —Mrs. A. Dolliver, Italy Cross, N.S.

* * *

For safe storage, wind left-over wool around a moth ball. —Mrs. R. F. Boyd, Winnipeg, Man.

* * *

You will never have trouble getting corn out of a pot or kettle if you put all the ears of corn in a basket such as used for French fried potatoes. Then lower them into the boiling water. Just lift out the basket when the corn is done.

A flat potato masher or slotted

lifter makes a handy tool for lifting poached eggs out of a pan. It slides easily under the egg and lets the water drain off before slipping egg onto the serving plate. —Mrs. Fowler Munn, Boiestown, N.B.

* * *

To pre-treat grease stains on shirt collars, rub with a little hair shampoo before putting them in the washer. The shampoo, which is made specially to dissolve body oils, will quickly remove such stains.

When preparing a tray for an invalid, cover it first with a small, colorful terry towel. It holds the dishes in place, absorbs spills, and adds a cheerful note to the setting. Clean-up is simple: a quick dip in the washing machine, with no ironing required. —Mrs. A. Kruszelnicki, Vanguard, Sask.

* * *

Pour hot wax over any leftover paint. Don't move it until wax is set. When you want to use the paint again, lift the wax off. There will be no paint scum. —Mrs. Art Smith, Baddeck, N.S.

* * *

Before painting woodwork, fill in all holes and cracks by mixing flour with some of the paint you are go-

ing to use. The mixture hardens like cement and matches perfectly. —Mrs. Henry Schafer, Waterloo, Ont.

* * *

A potato peeler with a slit blade makes a safe pencil sharpener for children.

Replace the pin stoppers on tubes of glue or household cement with cup hooks. They are easy to remove and can be hung up when not in use. —Mrs. C. L. Jackson, Medicine Hat, Alta.

* * *

Use a clothes sprinkler to moisten flour-shortening mixture for pastry. It distributes water evenly, and with a few stirs, it is ready to roll. —E. F., Manitoba.

* * *

I find empty plastic bags from fruit and vegetables handy to carry knitting and fancy work in. I thread a piece of ribbon a short way from the top and then I can carry it on my wrist. The wool slides out very easily and doesn't get soiled. —Mrs. C. D. Lawrence, Falmouth, N.S.

* * *

A few days before starting to freeze vegetables, I fill large clean fruit juice or tomato cans, tops removed, with clean water and put in the freezer to freeze solid. I add a can to each pan of water needed to cool the vegetables after blanching. This cools the vegetables quickly and saves water. —Mrs. Ben Emele, Merchant Grove, Sask.

* * *

"When a snap you tend to sew,
Does not meet and form a row.
Do not fret or steam or balk,
Master this feat with a bit of chalk."

First sew all your snaps on one side. Rub them with chalk and press against the side where the mates are to be sewn. Chalk marks will remain, marking the exact place to sew the opposite snap. —Mary Catherine Cuney, Ft. Wayne, Ind.

* * *

A string will tie much more securely if dampened slightly before tying around a parcel. —Mrs. F. T. Surridge, Wapella, Sask.

* * *

When making pancakes, I cut a raw potato in half and rub the cut side on the pan or griddle each time before pouring the batter. This prevents the pan from smoking. —Mrs. Selmer Larson, Eaglesham, Alta.

* * *

To prevent dishes from chipping or breaking from banging them against the faucet as you wash them, get a small piece of rubber hose and slip it over the faucet nozzle. This will protect your china. —Mrs. Allan Armstrong, Waueig, N.B.

* * *

A little sand sprinkled on freshly painted outdoor steps will dry like sandpaper and prevent slipping in wet or snowy weather. —Mrs. H. L. McKinnon, Quill Lake, Sask.

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Medical

Care . . . as the crow flies

[Sask. Gov't photo]

Any one of these air ambulance planes can be airborne in seven to eight minutes.

by ELVA FLETCHER

Home Editor

IT isn't long since a television series popularized the activities of Australia's flying doctors for Canadian TV audiences. Yet, within our own borders, there's an equally dramatic story—the story of the people who carry on Saskatchewan's air ambulance service. Merle and Russell Dayman of Windthorst, a farming community southeast of Regina, know from experience just how dramatic that service is.

The Daymans are a young couple, their home full of the assorted sounds of four children—5-year-old Gayle, 4-year-old Lyndon, Jason, who is 2½. Sheldon is the baby; he's 4 months old.

What happened to the Daymans can happen to any rural family. One July day Lyndon complained about a tummy ache. Next day he was no better. Merle and Russell, after talking with the doctor at Kipling 14 miles away, decided to hustle their son to Kipling hospital even though they knew the hospital could offer only minimal service at the time. Lyndon stayed in hospital overnight but his condition next morning convinced the doctor on duty of one thing: the boy needed surgery quickly. He suspected a ruptured appendix and the only hospital that could give the youngster the surgical care he needed was at Regina, 90 miles of gravel road away. Yet, a phone call later, an air ambulance was on its way to the Kipling airstrip from Regina.

Fifteen minutes after the plane landed, Mrs. Dayman and Lyndon were airborne; a half hour later they were in Regina. Further diagnosis confirmed the local doctor's suspicion; by two o'clock that afternoon Lyndon had been operated on for a severely ruptured appendix. Two weeks later he was home, happily tending his own little vegetable patch.

"We just didn't realize he was so sick," Mrs. Dayman says. And while it was a simple matter to get Lyndon to hospital by air ambulance, this wasn't always so.

SASKATCHEWAN'S Air Ambulance service began in 1946. It started with one aircraft, one pilot, one flight nurse and one aircraft engineer. Now there are six aircraft, four pilots, four nurses and a small, efficient ground crew. The planes were specially selected for their particular kind of work; and they are all equipped with

regulation airline communication and navigation aids. Patients pay \$35 for service anywhere in the province. The province's doctors are so much aware of the service that requests almost always originate with them.

Its principal purpose, of course, is to transport emergency patients from remote and isolated farms or small towns to larger centers where they can get the medical attention they need, as happened in the Dayman case.

Don Campbell, Air Ambulance director, explained that an emergency is a case where a patient requires immediate medical care not available at his location and where any great loss of time in getting necessary care could be fatal. The service is also used by other patients who, because of their condition, could not possibly stand the strain of a lengthy trip in a road ambulance or car, but who are well enough to make the time element less important.

PILOTS and nurses are "crewed" together, explains senior flight nurse Irene Sutherland. For example, she and Don Campbell make up one crew. There are two other crews in Regina and one based in Saskatoon. When the Saskatoon crew is off duty a Regina team relieves it. But . . . and there is a "but" to off-duty hours . . . pilots and nurses are on standby duty outside their regular 8-hour, 6-day shift. They report their whereabouts at all times so they can be reached and ready for duty if they are needed. Even as Irene and I talked, one of the nurses reported where she could be contacted during the following three hours.

Flight nurses, of course, have to adapt their hospital training to the cramped cabin quarters of small aircraft. That's one reason Irene took a course in aviation medicine. Pilots cope with all extremes of weather, with landings on fields never intended for aircraft. Many times on night flights they've been guided to their destination by a battery of car lights beamed onto the given location.

Who makes the greatest use of the service? Well, a lot of the requests are for help for farm and highway accident cases. Often expectant mothers are rushed to hospital for special treatment. Many are emergency cases such as Lyndon Dayman. Flights average about three a day and

over the years nearly 14,000 people from all over the province have been air ambulance patients.

Emergencies are actually routine to the air ambulance crews and, as Irene Sutherland knows, sometimes it is touch and go. In one case she kept a baby who took "blue spells" alive until he could be hospitalized. It happened this way. Shortly after he had been taken aboard Irene realized that her small charge's breathing was slowing down. Almost instinctively and with all haste she got him out of the incubator and began mouth-to-mouth breathing. She kept it up until the hospital doctors could take over. Later they credited her with saving the baby's life.



[Guide photo]
Two weeks after he was airlifted into Regina for emergency surgery Lyndon Dayman was back home with his favorite plaything, a rocking horse that his father had fashioned for him.

A number of babies have been born in flight. One farmer with an injured leg that had become gangrenous was rushed in for hospital care. Sadly enough there have been a few cases where requests for service came too late to be helpful.

All these patients are cared for in the cramped confines of a small cabin, often in turbulent weather. Oxygen equipment is standard in the air ambulance aircraft. In hangar stores, ready for whatever the emergency, there are such extra pieces of equipment as an aspirator, maternity kits, a portable incubator, croup tent. A few years ago polio patients, mostly children, were flown to treatment centers in portable iron lungs. And each nurse has her own "black bag"—a well-equipped nursing kit that includes a variety of medications. Any one of the six planes can be loaded and airborne with the necessary equipment in seven to eight minutes.

KIPLING is one of some 150 Saskatchewan communities with a prepared airstrip. This airstrip grid has been built up since air ambulance started. It's made the work of both pilots and nurses a lot easier. Still, they do use farm fields as landing strips quite often.

"We've always looked on the air ambulance service as a good service," Mrs. Dayman says. Now that it has touched their lives they know it's good. For them it more than fulfilled its basic purpose when it overcame the threat of time and distance to the life of their eldest son.



Nurse Irene Sutherland and pilot Don Campbell help ambulance attendants transfer patient from plane.

You can win

A

FREE HOLIDAY ON A TROPICAL ISLAND

This winter one of our subscribers will fly by jet to a tropical island courtesy of The Country Guide.

Will it be you?

Watch for details in
the October issue!

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HANDICRAFTS

Gifts to Knit

TWO new Beehive knitting books offer a bundle of gift ideas. See headwear, footwear, scarves, mitts, a mesh tote bag, golf club covers and an afghan in one; an assortment of men's socks and vests in second.



Keep head and ears cosily covered in handknit toques and novel helmets.

Socks and Vests, Book No. 91, 50¢, includes 17 sock designs and 3 for vests. Besides the cable, diamond, stripe, honeycomb and open



[Photos courtesy Patons and Baldwins Limited]



rib socks pictured here, there are polka dot socks to match this vest, mesh rib, petal rib, knee socks, houndstooth, basket weave and plain socks. Other vests feature basket weave and a sports weight in double knitting.

For handicraft patterns pictured above please address your order to The Country Guide Needlework Dept., 1760 Ellée Ave., Winnipeg 21, Man.



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2418

No. 2418. A basic slim dress with bias-cut bloused bodice, shallow neckline and unmounted sleeves may be varied with lined stole, bowed dickey and cuffs, purchased belts. Miss sizes 10, 12, 14, 16, 18; 70¢.



2199

No. 2199. A 3-piece suit features a slightly fitted jacket with notched collar and $\frac{3}{4}$ set-in sleeves; a hip-length, back-buttoned overblouse with high round neck, short unmounted sleeves and optional tie belt; and slim sheath skirt. Mix or match the fabrics. Miss 12, 14, 16, 18; 85¢.



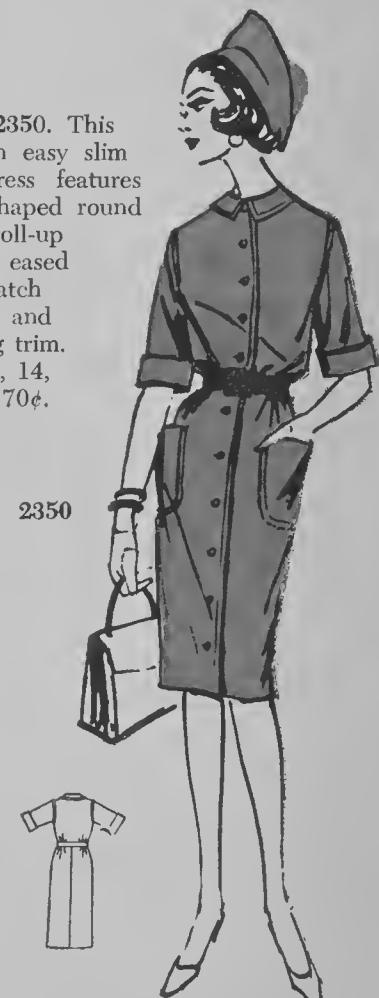
9792

No. 9792. Short raglan sleeves drop from the self-bound scooped neckline which releases slight Shirring. Self belt below light bodice blousing. Sew with slim shirt or full. Miss sizes 12, 14, 16, 18, 20; 70¢.



9854

No. 9854. Novel front bodice seaming is one feature of this collarless eased sheath. Others are short (or $\frac{3}{4}$ length) unmounted sleeves, back zipper and self tie belt. Order in miss sizes 10, 12, 14, 16; price 70¢.



2350

No. 2350. This quick 'n easy slim shirt dress features a flat shaped round collar, roll-up sleeves, eased skirt, patch pockets and stitching trim. Miss 12, 14, 16, 18; 70¢.

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Feast the Family at Thanksgiving

MAKE your Thanksgiving dinner a feast of good eating! You can do it with familiar foods served up with a dash of imagination. Let's look at the menu.

Hot Fruit Punch

Celery Sticks	Radish Roses
Orange Stuffed Duckling	Potato Rosettes
Honeyed Carrots	
Green Beans with Almonds	
Hubbard Squash Pie	

The hot fruit punch is a spiced combination of apple and orange juice warmed to suit the season. If yours is to be a small gathering, a duckling might be just the right size; for 6 to 8 people you would want 2 of the size called for below. Mashed potatoes take a paprika-topped rosette shape, the carrots glisten in a honey glaze, and toasted chopped almonds add crunchiness to canned or frozen garden beans. Vary the traditional pumpkin pie pattern by making yours from Hubbard squash or make your favorite from canned pumpkin and put the extra into pumpkin muffins.

Hot Fruit Punch

3 c. fresh, canned 48-oz. can apple or reconstituted juice	48 oz.
frozen orange	2 sticks cinnamon juice

Combine juices with cinnamon sticks in a saucepan and heat to boiling. Simmer 10 minutes to blend flavors. Remove cinnamon sticks and serve hot.

Thanksgiving Duckling

4 to 5 lb. duckling (ready-to-cook weight)	4 c. coarse bread crumbs
	1/4 tsp. pepper
3 T. butter	1 tsp. grated orange rind
1 c. finely chopped celery	1/2 c. cut-up orange sections
1/4 c. finely chopped onion	Thin orange slices
1 tsp. salt	Red currant jelly

Remove any pinfeathers from duck and singe it if necessary. Wash and dry thoroughly.

Heat butter; add celery and onion and cook over low heat, stirring often, until vegetables are tender but not browned. Combine lightly with bread crumbs, salt, pepper, grated orange rind and orange pieces. Loosely fill duck

with stuffing and secure opening. Fasten neck skin to back with a small skewer. Tuck wings under and truss the duck with skewers and string, taking care not to cross string over breast of bird. Place duck on a rack in a shallow roasting pan and roast, uncovered, in a moderately slow oven at 325°F. until meat is tender (about 2 1/2 hours). Serve on a heated platter, garnished with orange slices centered with red currant jelly. Yields 3 to 4 servings.

Honeyed Carrots

1 1/2 lb. carrots	1 tsp. chopped parsley
2 T. butter	
1 1/2 T. honey	

Peel washed carrots and cut in fingers or rounds. Boil in salted water until just tender, then drain. Add butter, honey and parsley and heat, uncovered, for 2 to 3 minutes. Stir carefully until carrots are well glazed. Yields 6 servings.

Hubbard Squash Pie

2 c. dry cooked Hubbard squash	1 T. ginger
	1 tsp. cinnamon
3 eggs	Salt to taste
1 c. brown sugar	2 c. milk
2 T. molasses	Two 9-in. pastry shells
1 T. melted butter	

Press cooked squash through sieve, then measure. Beat eggs; beat in brown sugar. Stir in squash and remaining ingredients and pour into pastry-lined pie pans. Bake 10 minutes in a very hot oven at 450°F., then reduce oven heat to moderate at 350°F. and continue baking about 30 minutes. Yields two pies.

Pumpkin Muffins

1 c. canned pumpkin	2 1/2 tsp. baking powder
1/4 tsp. soda	1/2 tsp. salt
1/2 c. shortening	1/2 tsp. nutmeg
1 1/4 c. sugar	1/2 tsp. ginger
2 eggs	1/2 tsp. cinnamon
2 1/4 c. flour	

Stir soda into the canned pumpkin. Cream shortening with sugar and eggs. Sift the dry ingredients together and add alternately with the pumpkin to the shortening mixture. Grease muffin tins and dust with flour. Fill cups 2/3 full with

muffin batter and bake in a moderately hot oven at 375°F. for about 20 minutes.

Potato Rosettes

Boil, mash and season potatoes. Whip 2 beaten eggs into each 3 cups of mashed potatoes. Fill a pastry tube with potato mixture and form rosettes on a baking pan or cookie sheet. Sprinkle with paprika and brown lightly in the oven at 425°F.

Green Beans with Almonds

Green beans (4 to 6 servings)	2 T. butter
1 tsp. dried savory, optional	2 T. chopped, blanched almonds, toasted



[Western Growers Assn. photo]
A harvest centerpiece of fresh fruit and vegetables decorates the table.

Cook beans in salted boiling water seasoned with savory, if desired. When beans are just tender, drain and add butter. Mix in toasted almonds or sprinkle them over the beans in serving dish.

Soup and Sandwiches

EARLY autumn days and cool evenings call for a steaming soup, clear and light, or dotted with vegetables. A simple soup stock takes advantage of good meat bones and provides a light clear consomme, and a base for onion and vegetable soups. A milk soup, such as the potato-enriched one below, is a hearty start for any meal. For supper, hot sandwiches like Cheese Pups team with baked beans in a satisfying meal or may be served with milk and coffee at an evening's end. If you like to be prepared for sandwich snacking, mix up the filling used in the Broiled Tuna Snacks and store it in the refrigerator. Two favorite sandwich makings are combined in the last of this month's recipes.

Simple Soup Stock

1 medium-size soup bone	2 tsp. salt
6 c. cold water	1/4 tsp. chopped parsley
1 1/2 c. cooked tomatoes (pulp and juice)	1 small onion, chopped
1/2 tsp. Worcester-shire sauce	Few grains pepper and celery seed or salt

Water saved after cooking vegetables may be used in place of cold water. Combine all ingredients in a saucepan and bring to a boil over high heat. Reduce heat and simmer for 3 to 4 hours. (Long slow cooking is one of the secrets in making soup.) Strain stock, cool and remove any excess fat floating on top.

Consomme: Heat and strain through cheesecloth.

French Onion Soup: Lightly brown about 3 cups thinly sliced onions in 2 tablespoons butter. Add to 5 cups of the strained soup stock. Simmer 20 minutes. For each serving, toast a slice of French bread; sprinkle with grated cheese and heat under broiler just long enough to barely melt the cheese. Place one toast slice in each serving dish and pour in the piping hot soup.

Quick Vegetable Soup: To 5 cups of the soup stock, add one carrot, finely chopped; 1/2 stalk celery, chopped; 1 cup mixed raw vegetables (turnip, onion, parsnip, etc.) and about 1/2 cup diced meat from the soup bone. Simmer until the vegetables are tender. If

desired, you may add a little barley, macaroni, noodles or rice for thickening, and some canned or frozen peas or beans for color contrast.

Swiss Style Potato Soup

4 medium potatoes	1/4 tsp. mustard
1/4 c. chopped onion	1/8 tsp. nutmeg
3 bacon slices, diced	Dash of cayenne pepper
2 T. butter	2 tsp. salt
1 T. chopped parsley	3 c. milk
1 tsp. Worcester-shire sauce	1/2 c. grated Swiss or processed Canadian cheese

Cook potatoes until tender; drain and mash. Saute chopped onion and diced bacon over low heat until tender. Add onion and bacon to potatoes, then stir in remaining ingredients except for cheese. Warm over low heat, stirring to prevent scorching. Serve hot, sprinkled with grated cheese. Yields 4 servings.

Cheese Pups

6 wieners	3 T. butter
1/2 c. processed cheese spread	1/2 c. finely chopped onion
1 1/2 c. fine potato chip crumbs	1/2 c. prepared mustard
6 wiener buns	2 T. horseradish

Heat wieners thoroughly in boiling water. Melt cheese in double boiler over low heat. Combine mustard and horseradish.

Split and toast buns, and spread with butter. Dip wieners in melted cheese, then roll in potato chip crumbs. Tuck coated wieners in buns; cover with onions and mustard sauce. Serve hot.

Broiled Tuna Snacks

1 c. tuna, drained and flaked	1 T. lemon juice
1/4 c. diced celery	1/2 tsp. salt
1 T. minced onion	1/4 c. condensed cream of mushroom soup
2 T. minced parsley	Sliced bread

Mix filling ingredients. Butter bread and trim off crusts. Spread filling on bread, roll or bring opposite corners together and pin with a toothpick. Toast under broiler.

Note: This sandwich mixture keeps well in refrigerator.



[Canadian Spice Assn. photo]

Appliance Wise

ARE you getting the best from your investment in labor-saving electrical appliances? A booklet prepared by the home economists at Manitoba Hydro offers suggestions for homemakers in purchasing, using and caring for household equipment.

Selection. Look for a nationally advertised brand. Its manufacturer has invested millions of dollars for your satisfaction. Buy from a reputable dealer; choose the one who earnestly tries to serve you best.

Ask these questions about service: (1) How long will the dealer or his authorized servicing agent make, without charge, any adjustment necessary to keep the appliance functioning properly? (2) How long are the major operating parts guaranteed by the manufacturer? Beyond this free service period, who will make any changes needed, and about what will you be expected to pay for service calls?

General Use

If you want to get the best performance from an appliance, follow the manufacturer's directions. Before using a new appliance, read the maker's instructions even if you have had a similar model before!

Always disconnect cords and appliances before cleaning or adjusting them. Frayed cords are dangerous; replace immediately. Replace plastic cords if they show evidence of cracking. Do not run lamp, appliance or extension cords behind radiators, under rugs, behind curtains or over air ducts and do not staple or nail them to the building structure.

Keep motor ventilating slots free from dust and dirt; a free flow of air is necessary to cool the motor.

Maintain fusing of lighting circuits at 15 amps. To check a fuse you suspect has blown, try it in another circuit which you know is working. Never use coins or tin foil for fusing.

Range Care

Always wipe spilled food away; don't let it dry or harden on the range surface. Spills on surface elements should be burned off or scoured with a mild abrasive. Most elements can be raised, and the pan beneath removed for washing. It is not advisable to line the drip pans under elements or the oven with aluminum foil as this builds up an intense heat which can do permanent damage to elements or oven thermostat.

Rotate elements in use rather than concentrating on one.

Open oven door after use to permit thorough cooling. If your oven will not go on, check the automatic time clock setting. It may accidentally have been moved from the manual position to a time setting.

Have a competent serviceman check the range occasionally to make sure the oven thermostat is set correctly, oven door closes tightly, that elements are operating correctly, and that the wiring is in top shape.

Other Appliances

Refrigerators. If yours is a manual defrost type, defrost it regularly

according to the manufacturer's instructions. Wash the inside occasionally with baking soda and water to destroy food odors; wash shelves with soap and water. Do not defrost by placing a plugged-in electric kettle to boil in the refrigerator as this will damage the machine. Instead, fill the defrosting trays with hot water or place a pan of hot water in the freezing compartment.

Semi-automatic or push button defrost-type refrigerators require defrosting when frost is $\frac{1}{8}$ inch thick. Food need not be removed from the freezing compartment during defrosting.

The automatic defrosting refrigerator defrosts itself usually once every 24 hours. Houseclean the refrigerator weekly and wipe clean any sticky spots.

Freezers. Frost formation $\frac{1}{4}$ to $\frac{1}{2}$ inch thick calls for scraping with a plastic scraper. Once yearly, when food stock is lowest, the freezer may be washed with a baking soda and water solution. Food need not be removed for normal defrosting. Shift it from one side to the other while scraping frost onto a cookie sheet placed on the freezer bottom.

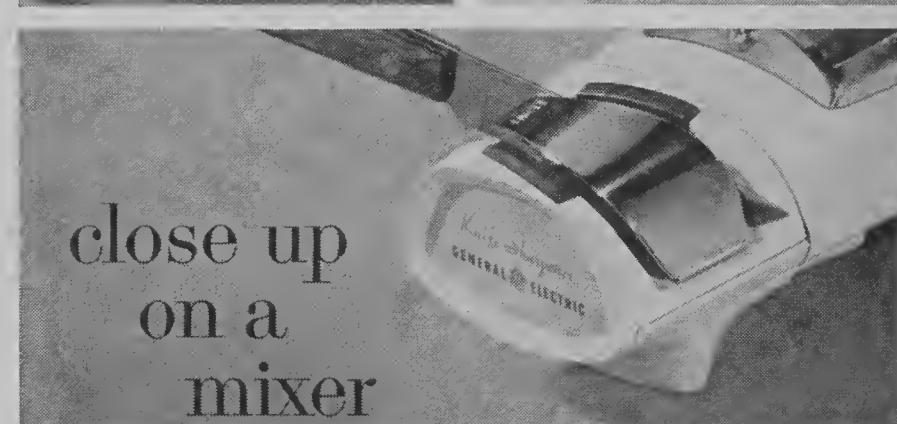
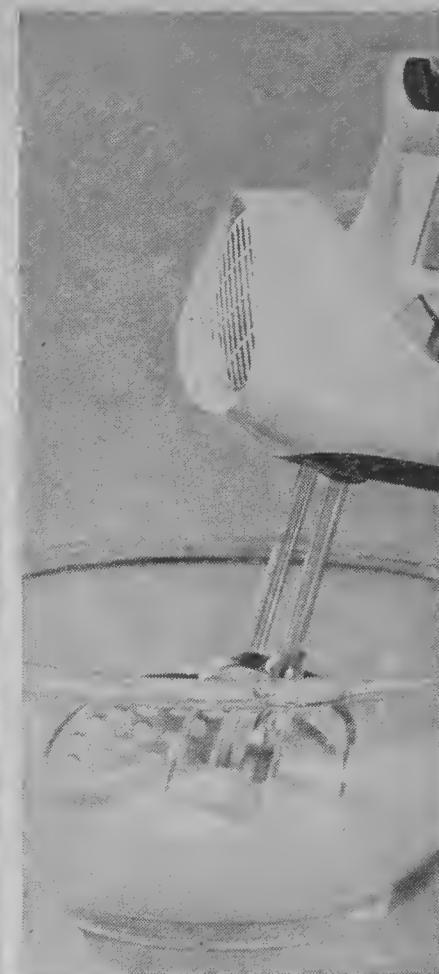
Freezers must not be exposed to the extreme temperature change found in unheated sheds and porches. Winter temperatures can congeal the oil, causing damage to the motor. Be sure the floor will support the fully loaded weight before locating a freezer.

If power fails, food may be kept from 48 to 72 hours in an unopened freezer. For a longer period, add dry ice if available, or transfer food to an operating freezer or frozen food locker plant.

Dishwasher. For streak-free dishes, use soft water. Soap needs vary according to local water composition. Prescrape burned-on food, egg, starchy food, lipstick. The dishwasher is self-cleaning; however, occasional wiping with a cloth dipped in a solution of water and vinegar or water and baking soda will keep the inside fresh and clean.

Garbage Disposals. These units are self-cleaning. Let motor and water run for 15 to 20 seconds after waste disappears. (For fibrous waste, let run for full 2 minutes.) To eliminate odor from onions or other strong food, grind a lemon or orange rind or a tray of ice cubes. Once weekly, flush the drain line by filling sink with water and then removing stopper. Never use drain-cleaning chemicals; they will damage the mechanism. Some machines have a safety device which stops the motor when stopper is lifted. Others do not, so never reach inside while the motor is running.

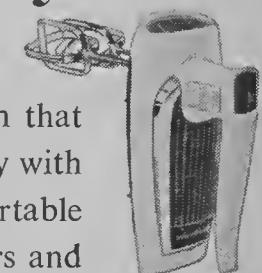
Use cold water to congeal grease and fat so that they may be flushed away easily. Disposals cannot handle filter tip cigarettes, foil, cans or bottles, cardboard containers, paper or gum. To prevent jamming caused by large pieces, cut corn cobs in smaller sections. Mix fibrous material such as pea pods and corn husks with other waste. Noise, particularly when grinding bones, is normal. V



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Baking a cake? It's the preparation that counts. Mix the batter automatically with Canadian General Electric's new Portable Mixer . . . easy. Remove the beaters and attach the speed-whipping disc for the cream . . . terrific idea! This mixer is streamlined for good looks . . . beautiful. A button on the handle switches to any of three speeds . . . excellent thought. A flick of your thumb and the beaters fall out for easy cleaning . . . thank goodness. Hang it on the wall or store it in a drawer . . . Marvellous! AND MORE. This gem of a mixer sharpens knives wonderfully. No wonder more Canadians choose CGE Appliances than any other make.



PORTABLE MIXER

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BOY and GIRL

The Giant Who Couldn't Sleep

by GLORIA LOGAN

ONCE upon a time there was a giant who had something wrong with his basal metabolism. He couldn't sleep. When all the other giants curled up in their caves and snored loudly enough to shake the mountains, Old Wall-eye, for that was his name, ranted and raved over the countryside. The more he stayed awake, the grouchier he grew, until the other giants found there was no living with him, and so they went away.

Being the only giant in that part of the world made Old Wall-eye even more grouchy. Now when he roared and started a landslide, he couldn't blame it on the snoring giants, and that made him very peevish and cross.

One day he started out to find someone who could tell him how to go to sleep. First he met a little boy.

"Little boy," he whispered. "How do you go to sleep?"

"The sandman comes and puts sand in my eyes," answered the little boy.

So the giant went to the seashore and dug a big pile of sand. He put it on his back and started up the mountain to his cave. That night he stretched out on his bed and spooned sand into his eyes. He used up three and one-eighth tons. But that only made him more wall-eyed than ever.

"Sandman, faugh," he roared. "That's for babies. I'll ask someone else."

"Sir, how do you get to sleep?" he asked an old man.

"I count sheep," answered the old man. "Yes, I count sheep. It always works."

"Always works, eh. Then I'll try it."

The giant went to town and bought a great flock of sheep and drove them to his cave in the mountains. But the more he counted, the more wall-eyed he grew, because the answer never came out even and he spent the whole night wondering if the sheep man had cheated him out of a half-dozen sheep.

"Sheep, faugh," he roared. "That's for old men. I'll ask someone else."

"How do you get to sleep?" he asked a young fellow he met on the way.

"Oh, that's easy," laughed the young man. "I just work hard every day, and at night I'm so tired I drop right off. Nothing to it. Just hard work."

"Well, I'm not so young," answered the giant. "But I'm not so old, either. I'll try it."

"I want some good, hard muscle-tiring work," he told the next man

he met. The man said: "Very well, I have a field that is full of stones. Pick them up and put them in a pile for me."

And the giant did.

Then he moved a small mountain that was right in the way of a path that the people took to the next village. Next he dug a well for an old woman.

After lunch, he changed the course of a river and pulled up some big trees for a farmer who was clearing a patch for his garden. He moved a house from the mountain into the valley and picked some more stones. Then it was supper time.

"Are you sleepy yet?" asked the young fellow.

"I don't know," the giant yawned. "I haven't been asleep for 139 years, so I've forgotten what it feels like. But I can hardly keep . . . my . . . eyes . . . open. . . . In fact . . . I can't . . ."

"That's it," the young fellow said. "Lie down quickly and close your eyes."

The giant dropped in his tracks,

and, pulling a big boulder under his head for a pillow, he shut his eyes.

First he snored dreadfully. "Gul-l-p . . . fa-ah . . . sn-rrr-ugh." And the people thought their houses would collapse about their ears. And he slept, and he slept.

After a month, he stopped snoring, and you had to look twice to see if he was breathing at all. After a year, the grass grew up between his toes and began to cover him like a green velvet blanket. And he slept, and he slept, and he slept.

After a hundred years, people had grown so used to the sleeping giant they never noticed him at all. Little spruce trees grew over him, and sheltered him from the sun and the rain. In the winter, his blanket became white with snow. And he slept, and he slept, and he slept.

And he's sleeping still. If you look closely at the hills near that place, you will see they do look like a sleeping giant. Sometimes, the mountains shake in that country and then people look at each other and say the giant is turning over in his sleep. And still he sleeps because he is so tired. Perhaps someday he will have enough sleep and wake up again, but that will not be for hundreds of years yet. He's so . . . o . . . s-l-eeee-p-y. . . .

Puzzle Fun
by LAURA D. CROCKETT

In this puzzle fill in the squares to make the words given in the clues below.

1.	B	E		
2.		B	E	
3.			B	E
4.			B	E

1. Something to sit on
2. Very fat
3. To resist the boss
4. A group, as Indians

Answers

1, Bench; 2, obese; 3, Rebel; 4, Tribe.

Letter Problem

by MAUDE HALLMER

To solve this problem, mark through these 14 letters using only five straight lines. Don't take your pencil off the paper. Remember, it must be one continuous line.

A	B	C	D
E	F	G	H
I	J	K	L
M			N

Answer

This is the way to draw the line:
L, H, E, I, M, J, G, D, C, B, A, F, K, N,
V, . . . o . . . o . . . s-l-eeee-p-y. . . .

New Brunswick boys
and girls grow flowers as
a fund-raising project

Fall Planting for Spring Harvest

Right: Armed with rakes and trowels Red Cross Juniors tidy up their school yard to plant bulbs. Below: Come spring their harvest is ready for picking.



[Joe Michaud photos]



PUPILS of New Brunswick's Lower Norton School have a special Junior Red Cross project.

Each fall for several years now these boys and girls have cleaned up the school grounds to make a flower bed. Once that is done they plant narcissi bulbs for spring blooming.

When these earliest of spring flowers appear, the boys and girls gather and sell their fragrant harvest. The money they collect, of course, goes into the Junior Red Cross account which is used to help handicapped girls and boys in Canada and other countries. V

YOUNG PEOPLE

Courtesy in the Classroom

SO it's September and you are back to school! The fact that you are in high school, either as juniors or seniors, proves you are growing up. And growing up, of course, is the effort each one of us makes to develop a mature mind. People with mature minds think and behave as adults. They know when to accept orders graciously and when to give in gracefully. They accept their responsibilities.

For example, you can get a lot more out of classes if you have the things you need ready. The same applies to getting to classes on time. Are you sometimes tempted to watch the clouds go drifting by or let your minds thrust themselves out into space? Most of us are, but you'll get a lot more out of school if you work at keeping your minds on the subject under study. After all, this is the way you get the basic education that's essential to your future.

Why not make your teachers' work easier and more pleasant too? They'll appreciate the same courtesies you offer to other adults. And it's further proof that you are growing up when you behave without classroom supervision or when you work attentively until classes are over.

Do your actions in school corridors suggest you are growing up? Do you take your turn instead of pushing your way through? What about your locker? Is it neat? Do you stop to talk at length with friends and block the flow of traffic? Do you keep to the right to allow corridor traffic to flow smoothly?

As you become involved in school activities, will you do your share to make them successful? You'll find it helpful to know the rudiments of parliamentary procedure. Start by learning how to call a meeting to order, how to make a motion, how to nominate and elect officers. You

may already know how to go about these things through your 4-H work; if not, check in the school library.

You have a responsibility when you vote for fellow students who have been nominated for office in your school organizations. Vote for the capable ones; and, at the same time, try to be a capable person yourself. It's never wise to take on so many extra duties that you can't do any one of them thoroughly. There's little satisfaction in being "a jack-of-all-trades and master of none." Accept your share of the work and, once you have accepted a job, do it as well as you can.

Here's a quick quiz to guide you:

1. Do I get my books and school things ready the night before?
 2. Do I prepare lessons beforehand?
 3. Do I treat teachers respectfully?
 4. Do I arrive at class on time?
 5. Do I pay attention to questions and answers, directions and assignments?
 6. Do I use interruptions to "fool" around?
 7. What is my attitude to class projects and teachers?
 8. Do I accept my share of responsibility for school activities and carry them through to the best of my ability?
- By answering these questions honestly and sincerely you'll know the areas that need improving on. V



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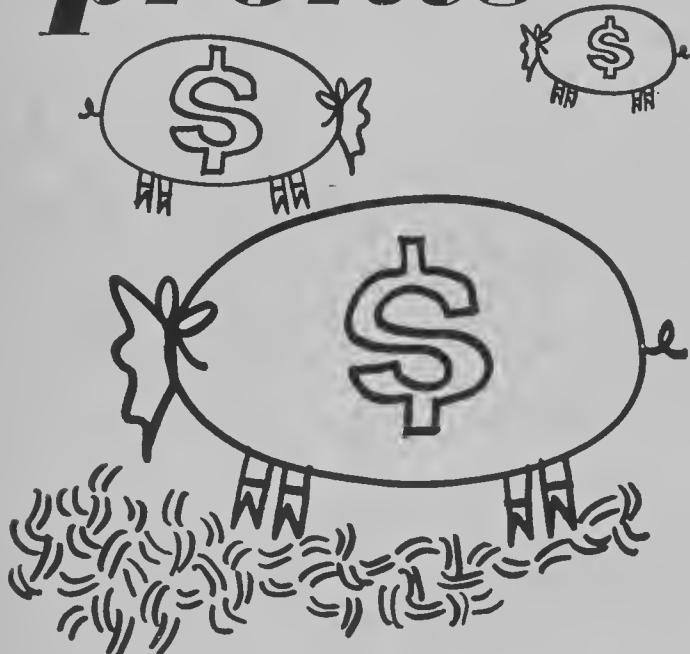
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What Farm Organizations Are Doing

CFA PRESSES FOR RAIL LINE ABANDONMENT POLICY

The Canadian Federation of Agriculture, in a brief presented to Transport Minister Leon Balcer, called for an immediate halt to rail line abandonment proceedings.

The formulation of a national plan and policy on rail line abandonment is required, the CFA delegation stated. The plan should embrace the operations of both railways and should make possible orderly, equitable abandonment, where this is necessary, over a period of years. In the meantime, and until such a plan and policy is developed, no further applications for branch line abandonment should be considered.

The Federation submission said that it accepted in principle the necessity of an increase of line abandonment over the years ahead, but what is needed is a "clear guide for planning and investment by affected businesses, and by farmers." The major concern in this connection is with the effects of rail line abandonment in the Prairie Provinces, but other parts of Canada are also affected by such action in important ways. V

FUA CONSIDERS HUTTERITE QUESTION

The Farmers Union of Alberta board of directors, after discussion of the Hutterite question in the province, adopted a motion calling for no further expansion of Hutterite colonies until they abide by the curriculum set for schools in Alberta, and that a condition of future expansion be that schools for Hutterite children be required to be built on government land outside the colonies.

The FUA Board decided also to study the Hutterite question further. It has appointed a committee to look into the possibility of the Government amending the Communal Properties Act so as to prevent pur-

chasers of land for Hutterite settlements doing the purchasing in such a manner as to make other land in the area untenable by private property owners.

The FUA Board also passed a resolution stating that adequate compensation for crop damage occurring in oilfield operations be assured by means of some assessment or formula, or standard rate, and not left to negotiations and bickering between farmers and oil company representatives.

The Department of Mines has been advised by the FUA that it protests burial of pump bases and other debris in farm fields, and that companies concerned be held liable for any accidents or field damage which may occur and which is attributable to such a method of disposal. The FUA believes settlement of such damage claims should be made within 60 days of the occurrence of the damage. V

NATIONAL FARMERS UNION BOARD MEETS

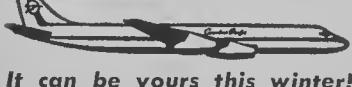
The National Farmers Union joint board meeting in Saskatoon last month heard President A. P. Gleave call for agricultural policies, such as ARDA, the deficiency payment program and price supports, to be designed to assure the continuance of the family farm.

"It is significant," Mr. Gleave said, "that the family farm structure in North America has continued to provide an abundance of food, while the large-scale, state-controlled agriculture, as operated in the Communist countries, has failed. This," he added, "was in itself a substantial argument for the family farm."

Outlining the need for producer marketing boards, Mr. Gleave said: "In view of the revelations made by the Restrictive Trade Practices Commission report, we must take constructive steps to protect the farmers' interests in the marketing of livestock and other products and ensure that



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Be sure to watch for the October issue of THE COUNTRY GUIDE to get full details on how you can win an expense-paid winter holiday in the lovely Pacific Islands of Hawaii. You won't want to miss this chance to fly to Hawaii and bask in the tropical sun this winter, courtesy of THE COUNTRY GUIDE.



Watch our October issue

Science Now Shrinks Piles Without Pain or Discomfort

Finds Substance That Relieves Pain
And Itching As It Shrinks Hemorrhoids

Toronto, Ont. (Special)—For the first time science has found a new healing substance with the ability to shrink hemorrhoids and to relieve pain and itching. Thousands have been relieved with this inexpensive substance right in the privacy of their own home without any discomfort or inconvenience.

In case after case, while gently relieving pain actual reduction (shrinkage) took place.

Most amazing of all—results were so thorough that sufferers made statements like "Piles have ceased to be a problem!"

The secret is a new healing substance (Bio-Dyne)—discovery of a famous scientific institute.

Now this new healing substance is offered in suppository or ointment form called Preparation H. Ask for it at all drug stores—money back guarantee.



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they receive the most that can be had for the product being sold."

The NFU Council, following consideration of a wide-ranging policy statement by the joint board meeting decided on these steps:

- To ask the Federal Government to make immediate increases in the initial payments for wheat, oats and barley, and to urge that the increases be announced.
- To seek a meeting with the Board of Grain Commissioners to discuss the problem of overages.
- To present the new NFU constitution, approved by the joint board meeting, to the various provincial union annual conventions for ratification.
- To meet and explore the possibilities of closer collaboration with the Canadian Federation of Agriculture at a meeting later this fall. ✓

Letters

A Fine Artist!

Mr. De Vos and I enjoy your paper very much and thank you for the good reading for so many years. In particular we appreciate the contributions of Clarence Tillemanus. He is a fine artist. I always cut out his wildlife articles for keeping. Now, in the July issue "The Little Bears" appeared. I certainly will keep that too. He must be a happy man and a lover of animals.

MRS. V. DE VOS,
Kentville, N.S.

Keeping Cool on a Hot Day

We have been getting The Country Guide for a few years and hope to continue for many more. The whole family enjoys it. I look forward to the patterns and recipes, and my husband goes through it thoroughly. And, of course, we like to get the stories for the children.



This is a picture of our three girls—keeping cool on a hot day in a mud puddle. Our two boys were having a sleep when this was taken. I don't know if all children are the same, but ours will spend hours in one little mud hole!

Thanks again for a good magazine.

MRS. JAMES SNIDER,
Downsview, Ont.

Is "Canadian" a Nickname?

In reference to the letter of H. G. Davis (July issue) I, being an unsubjugated Canadian, disagree with everything he said. He should come to Nipigon and see Canadians

flying their own "maple leaf" flag proudly.

The immigrants that come to Canada are compelled to take the Oath of Allegiance, I believe, in order to become British subjects; but this certainly doesn't mean people born here have to be anybody's subjects. I am not nor do I consider it a privilege to be a subject.

In our municipal tax bills and assessment forms we are asked to classify ourselves as British subjects or aliens. I refuse, because I strongly feel I am a Canadian. I suggest the government print new forms with "Canadian" and "alien" on them.

If the word Canadian is just a nickname, then Canada has no right to be in the United Nations as a free nation.

E. E. RAJALA,
Box 5101, Nipigon, Ont.

Distinctively Canadian

I am a Canadian of English-Scotch extraction, second generation. I would like to see Canada with a flag of its own, with no colonial stigma thereon.

I am a veteran of the last war, wounded in Italy. By a little stretch of the imagination, or a turn of fate, I might have been killed in action. Then I would have been included

Catholics Thank God There IS a Purgatory

You may not agree with this age-old Catholic belief.

You may contend, as many do, that Purgatory is not mentioned in the Bible. You may have heard that it is nothing more than a cunning fable, designed by the Catholic priesthood to frighten and deceive the faithful. You may have been told that the Apostles and the early Christians did not believe in Purgatory.

It is true, of course, that the Bible does not mention the word Purgatory, any more than it does numerous other words and terms commonly accepted by all Christians. But it does clearly indicate that there is such a place of satisfaction for sin and the temporal punishment due to it after death but before the general judgment.

"Fire shall try every man's work, of what sort it is," wrote St. Paul (1 Corinthians 3: 13-15) . . . and even though his work shall be "burned," the man himself "shall be saved, yet so as by fire." Paul himself observed the custom of praying for the dead: "The Lord grant unto him (Onesiphorus) to find mercy of the Lord in that day" (2 Timothy 1:18). The "fires" that try a man's work are certainly not to be found on earth or in heaven, and the fires of hell do not save. Would Paul have prayed for Onesiphorus, then dead, if he believed the soul of his departed co-worker was beyond help?

Millions of people departed this life with no serious sins on their souls, even the just man has his small failings. God would not deny them heaven, nor would He condemn them to everlasting punishment. Therefore, as nothing defiled can enter heaven (Revelations 21:27) there must be a place where these lesser sins can be cleansed.

But proof as to Purgatory is not limited to the Bible. The fathers and

doctors of the Church speak repeatedly of the practice of the first Christians of praying for the dead. Tertullian, second century, admonished "the faithful wife to pray for the soul of her deceased husband." The fourth century historian Eusebius, St. Cyril of Jerusalem, St. Ephrem, St. Ambrose and St. John Chrysostom, all spoke of the efficacy of prayers for the departed souls. The latter, in fact, said such supplication was "ordained by the Apostles."

All the liturgies of the Church are replete with appeals for God's mercy upon the souls of the departed. Inscriptions on the walls of the catacombs of the first Christian era voice similar prayers. It would not be necessary to plead for those in heaven — futile to pray for those in hell. So there must be a place in between, which Catholics call Purgatory.

And for Catholics, death would be a much more frightening prospect if there were no Purgatory, for all who go there may be tried "as by fire," but all are assuredly saved. If you would like to know more about the doctrine of Purgatory, write today for free pamphlet. It will be mailed in a plain wrapper; nobody will call on you. Ask for Pamphlet No. CY-14.

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TORONTO 5, ONT., CANADA

with those who are supposed to have died fighting for the Union Jack version of a Canadian flag. This would not be true. I would have died wishing for a truly Canadian flag.

J. BENSON,
St. Malachy, R.R. 1,
Dorchester Co., P.Q.

The letter by Olivier La France (July issue) is very correct as far as it goes. He might have mentioned Ireland or the China War as other shameful examples.

As a Canadian subject, I say we should have a flag of our own. The Red Ensign or Union Jack are borrowed flags like the name "Royal,"

which has been added to the Canadian Legion.

In 2 years on the battle line, I saw no Union Jack. It was back where those that wanted it were safe.

Incidentally, your editorial and the report by Professor Barber (on Canada's Crisis in Foreign Exchange) are well worth the price of the magazine.

D. F. MACDONALD,
Westfield, N.B.

"You can't suppress news," I told him. "It's not democratic."

"Who says you have to suppress it?" he retorted. "I have a plan that can preserve our democracy AND our sanity too. It's called the Foreign Mother-in-Law Plan."

"I don't know why, but I'm still listening," I groaned.

"It came to me when a city friend told me how well he used to get along with his Russian mother-in-law," Ted explained. "Right up until the old lady died they never had any trouble. Every day she came to visit them my friend would say 'hello mama,' and she'd just mutter something back. Sometimes she'd sit in a corner and sort of croon away to herself. My friend used to like that because he figured she was truly happy. In fact, he said as much to his wife after the old lady died."

"Oh, she wasn't crooning," his wife told him. "She was lamenting and praying. In fact, she was asking the saints to forgive me for being so foolish as to marry a foreigner."

"The point is," said Ted, "my friend escaped years of trouble and argument just because he and his mother-in-law couldn't communicate."

"That's how my plan would work," he went on triumphantly. "If something happens in China, let the announcer tell us about it in Chinese, and so on. I say we can dig up enough trouble in English-speaking countries without us siftin' every foreign land for bad news, and then translating it."

I must admit a man could ride through a whole bunch of crises that way and not get all worked up over 'em.

Sincerely,
PETE WILLIAMS.

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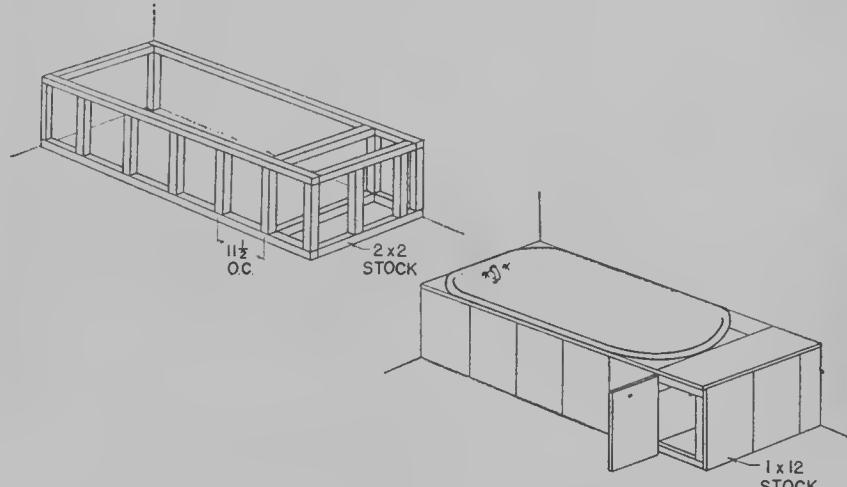
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Modernize an Old Bathtub

by C. RAYMOND



An old-fashioned bathtub can be readily modernized by the home craftsman. Storage space is provided by extending the enclosure beyond the end of the tub. If the tub is one with exposed pipes, install a door for easy access to plumbing.

The framework is made of 2" by 2" lumber. The paneling is made of 1" by 12" lumber or tileboard. The base of the frame should be positioned on the floor so the dimensions can be determined. When fastening the sole to a wooden floor, use 8-penny nails.

For tile floors use an adhesive or drill holes in the tile for expansion anchors and screw the sole in place.

Cut the uprights 2 3/8" shorter than the lip of the tub if paneling is used. Assemble the uprights to the top plate. Slide the completed sections in place under the lip of the tub and toenail to the sole and to each other. Attach the paneling. Apply caulk where the tub and paneling meet.

Make the door, planing 1/16" from all edges for clearance. Hang the door. Add door pulls and friction catches.